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SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - MIDDLESEX COUNTY
DOCKET NO. MID-5418-12-AS

VALERIE PANZARELLA,)	
Individually and as)	
Executrix and Executrix)	
ad Prosequendum of the)	STENOGRAPHIC TRANSCRIPT
Estate of MICHAEL C.)	
ARGENTO,)	OF
Plaintiff,)	
)	JURY TRIAL
V.)	
)	(VOLUME XXIV)
CHARLES B. CHRYSTAL)	
COMPANY, INC., et al.,)	
)	
Defendants.)	

B E F O R E:

HONORABLE ANA VISCOMI, and a Jury

TRANSCRIPT of the stenographic notes of the proceedings in the above-entitled matter, as taken by and before LINDA M. JORRITSMA, a Certified Court Reporter and Notary Public of the State of New Jersey, held at the MIDDLESEX COUNTY COURTHOUSE, 56 Paterson Street, New Brunswick, New Jersey, on Monday, August 8, 2016, commencing at 8:37 a.m.

Job No. NJ2334756

<div>Page 4799</div> <div>1 APPEARANCES: 2 3 LEVY KONIGSBERG LLP BY: MOSHE MAIMON, ESQ. 4 AMBER R. LONG, ESQ. 800 Third Avenue 5 New York, New York 10022 212-605-6200 6 mmaimon@levylaw.com along@levylaw.com 7 Attorneys for Plaintiffs 8 9 DAVIS, CEDILLO & MENDOZA, INC. BY: RICARDO G. CEDILLO, ESQ. McCombs Plaza, Suite 500 10 755 East Mulberry Avenue San Antonio, Texas 78212-3135 11 210-822-6666 rcedillo@lawdcm.com 12 Attorneys for Defendant, Lorillard 13 14 HUGHES, HUBBARD & REED, LLP BY: JAMES E. BERGER, ESQ. 2345 Grand Boulevard 15 Kansas City, Missouri 64108-2663 berger@hugheshubbard.com 16 Attorneys for the Defendant, Hollingsworth & Vose 17 18 BROWN & CONNERY, LLP BY: STEPHEN J. DeFEO, ESQUIRE 360 Haddon Avenue 19 Westmont, New Jersey 08108 sdefeo@brownconnery.com 20 Attorneys for the Defendants, Lorillard and Hollingsworth & Vose 21 22 23 24 25</div>	<div>Page 4801</div> <div>1 INDEX 2 WITNESS: PAGE 3 4 VICTOR ROGGLI DIRECT BY MR. CEDILLO 4839 CROSS BY MR. MAIMON 4974 5 6 7 8 EXHIBITS 9 No. Description Page LTC-11 Marked for Identification 4926 LTC-12 Marked for Identification 4937 10 P-130 Marked for Identification 4981 P-131 Marked for Identification 4984 11 P-132 Marked for Identification 5000 P-133 Marked for Identification 5011 12 P-134 Marked for Identification 5019 P-135 Marked for Identification 5024 13 P-136 Marked for Identification 5029 P-137 Marked for Identification 5033 14 P-138 Marked for Identification 5075 P-139 Marked for Identification 5080 15 P-140 Marked for Identification 5088 P-141 Marked for Identification 5088 16 17 18 19 20 21 22 23 24 25</div>
<div>Page 4800</div> <div>1 APPEARANCES (continued): 2 3 HOAGLAND, LONGO, MORAN, DUNST & DOUKAS, LLP BY: ALAN I. DUNST, ESQ. 4 DANIEL R. KUSZMERSKI, ESQ. 40 Paterson Street 5 P.O. Box 480 New Brunswick, New Jersey 08903 6 732-545-4717 adunst@hoaglandlongo.com 7 dkuszmerski@hoaglandlongo.com Attorneys for Defendant, Whittaker Clark & Daniels, 8 Inc. 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</div>	<div>Page 4802</div> <div>1 (The following takes place out of the 2 presence of the jury.) 3 THE COURT: Good morning. 4 Today is August 8, 2016. We are here 5 with regard to the continued trial in the matter of 6 Valerie Panzarella individually and for the Estate of 7 Michael Argento versus Charles B. Chrystal Company, 8 et. al., Docket No. 5418-12, outside the presence of 9 the jury. Could I have appearances, please, on 10 behalf of the plaintiff. 11 MS. LONG: Good morning, your Honor. 12 Amber Long and Moshe Maimon on behalf of the 13 plaintiff. 14 THE COURT: Thank you. 15 On behalf of the defendant Lorillard? 16 MR. CEDILLO: Good morning, your Honor. 17 Ricardo Cedillo and Mr. Stephen DeFeo for Lorillard. 18 MR. DeFEO: Good morning, your Honor. 19 THE COURT: Good morning. 20 On behalf of the defendant Hollingsworth 21 & Vose. 22 MR. BERGER: Good morning, your Honor. 23 Jim Berger and Steve DeFeo for Hollingsworth & Vose. 24 THE COURT: And on behalf of the 25 defendant Whittaker Clark & Daniels.</div>

Colloquy -

<p style="text-align: right;">Page 4803</p> <p>1 MR. DUNST: Good morning, your Honor. 2 Alan Dunst and Daniel Kuszmerski on behalf of 3 Whittaker Clark & Daniels. 4 THE COURT: Good morning. 5 So we have an expert witness on behalf of 6 Lorillard, and that is Dr. -- 7 MR. CEDILLO: Roggli. 8 THE COURT: Thank you. I couldn't 9 remember his name. I was thinking Eagleman. 10 MR. CEDILLO: No, that would take much 11 more time than any of us have. Tell him I said that. 12 Okay? 13 THE COURT: So, however, in the meantime 14 before the jury gets here, we are continuing with 15 regard to objections to certain designations of the 16 testimony taken in another matter of M.S. "Chip" 17 Block. 18 Okay. Where do we go after -- from 19 where we concluded last? 20 MR. MAIMON: Starting on page 41, line 21 19, your Honor, for the next several pages, and I'll 22 voice -- it's the same objection through 44-6. This 23 is talking about the generation or generations of 24 Kent cigarettes after the relevant time period, and 25 the waste involved, and whether or not there was</p>	<p style="text-align: right;">Page 4805</p> <p>1 relevance of what is going on today in 1998 when this 2 witness is giving testimony, but also it gives expert 3 testimony about what they've learned and what they've 4 managed to improve and whether or not it's 5 characteristic of a high-efficiency filter. 6 THE COURT: Thank you. 7 MR. CEDILLO: I think it's part of the 8 story, your Honor. This is the engineer who created 9 the machine and he's giving his perspective from his 10 firsthand knowledge. 11 THE COURT: Thank you. 12 MR. MAIMON: But it's today. 13 THE COURT: Well, he's giving the 14 testimony today. 15 MR. MAIMON: No, no, he says -- in fact, 16 "QUESTION: Is that a characteristic of many 17 high-efficiency filters?" 18 He says, "Not today, because we have 19 learned how to improve the thing. That was the first 20 time we got away from the asbestos-type filter, and 21 then we managed to make further improvements to get 22 rid of that objection." 23 It's not time bound. It's a period 24 which would span 1956 to 1998, and there's no 25 indication here as to when that happened.</p>
<p style="text-align: right;">Page 4804</p> <p>1 waste in the subsequent products or not. And we 2 would object on relevance grounds. 3 MR. CEDILLO: Your Honor, the relevance 4 is the suggestion that we were taking the asbestos 5 out because we knew of some great danger. And 6 obviously the truth is quite different. It was a 7 very wasteful process. He explains the differences 8 between the asbestos filter process and the new 9 process, which was faster, cheaper, easier, less 10 labor-intensive and much more economical. And that 11 belies the impression that they've tried to create 12 that we knew it was some sort of dangerous substance 13 we were rushing to -- to -- and took our sweet time 14 to get to. So I think it is relevant. 15 THE COURT: Thank you. 16 Having had an opportunity to review some 17 of this testimony, although it is outside the period 18 of exposure and after the asbestos was taken out, 19 this goes to part of the defense, and that is why 20 asbestos was used in the beginning and why they took 21 it out. And so for that purpose, this portion of the 22 testimony remains in. The objection is overruled. 23 So where do we go next? 24 MR. MAIMON: 44-7 through 12, your 25 Honor. Our objection is not only with regard to the</p>	<p style="text-align: right;">Page 4806</p> <p>1 MR. CEDILLO: The relevance, your Honor, 2 is that it's talking about the draw, and the features 3 that make the draw to stay different from the 4 difficult draw, which was part of our characteristics 5 that Mr. Argento apparently never picked up on -- 6 MR. MAIMON: My point -- 7 MR. CEDILLO: -- because he didn't smoke 8 the original cigarette. 9 THE COURT: Hold on one moment. 10 Mr. Berger wanted to add something. 11 MR. BERGER: No. 12 MR. MAIMON: That might be relevant, 13 your Honor, if this were tied to the 1957, 1958, 1960 14 time period. But this witness is talking about 1998 15 and today, and so we object. 16 THE COURT: That second sentence does 17 not pick up from today. I mean, that first sentence 18 talks about today, when he's giving the testimony in 19 1998, you said? 20 MR. MAIMON: Yes, your Honor. 21 THE COURT: Okay. But the second 22 sentence thereafter, "That was the first time we got 23 away from asbestos-type filter, and then we managed 24 to make further improvements to get rid of that 25 objection."</p>

Colloquy -

<p style="text-align: right;">Page 4807</p> <p>1 How much -- so this objection is to 7 2 through 12? 3 MR. MAIMON: Yes, your Honor. 4 THE COURT: Okay. How about if we just 5 got rid of that first sentence where he puts it in 6 the "today" time frame of 1998, and left the rest of 7 it? 8 MR. BERGER: That's all right with us, 9 your Honor. 10 MR. CEDILLO: Remove all of line 9 and 11 10 ending with "thing." 12 THE COURT: Correct. 13 MR. CEDILLO: Yes, your Honor. 14 THE COURT: So that's what we'll do. 15 Where do we go next? 16 MR. MAIMON: 46-18, your Honor, through 17 48-7. This has to do with equipment used to package 18 Kents and packaging of Kents and packaging of another 19 brand called Old Gold, and we object on relevancy 20 grounds. 21 MR. CEDILLO: Your Honor, the integrity 22 of the packaging has a lot to do with the condition 23 of the packages that Dr. Longo chose to test, and 24 this is a description of what they looked like when 25 they were being manufactured and coming off the</p>	<p style="text-align: right;">Page 4809</p> <p>1 MR. MAIMON: Yes, it was. 2 MR. CEDILLO: I think 1, 2 and 3 and 4 3 should come out and it would pick up at 5. 4 THE COURT: Well, 1 is the end of the 5 prior answer. 6 MR. CEDILLO: Sorry, yes. 7 THE COURT: So 2 through 4 you're going 8 to take out? Is that correct? 9 MR. CEDILLO: I think so, your Honor. 10 MR. BERGER: We'll take out, yeah, 2, 3, 11 4. That is correct. 12 THE COURT: Correct. 13 MR. CEDILLO: Begin at 5. 14 THE COURT: Where to now? 15 MR. CEDILLO: Sorry I missed that. 16 MR. MAIMON: Page 56-2 through -- I'm 17 sorry -- 58-6. 18 THE COURT: 56-2 to 58-6. And what's 19 the nature of the objection? 20 MR. MAIMON: This calls for expert 21 testimony, your Honor. What is it about the 22 condition or the picture in 8-B that would have 23 prevented it from functioning and performing in the 24 more manner in which Lorillard intended it, and 25 whether or not it would be more likely or less likely</p>
<p style="text-align: right;">Page 4808</p> <p>1 assembly line, and we can contrast that with the 2 condition that Dr. Longo had. So it's part of that. 3 That's the relevancy. 4 MR. BERGER: And it's also -- if I may, 5 your Honor, it's also foundational to what our 6 expert, Dr. Reinert, will be able to tie up, that 7 this kind of packaging, the cellophane that they were 8 packaged in, was not airtight, could lead to the 9 degradation over the 40 years between the packaging 10 and when Dr. Longo tested the cigarettes. 11 THE COURT: Thank you. Anything 12 further? 13 MR. MAIMON: No, your Honor. 14 THE COURT: For that purpose for which 15 the defendant seeks to introduce this testimony, it 16 will be permitted. The objection is overruled. 17 Where do we go to now? 18 MR. MAIMON: 55, lines 2 through 3. 19 THE COURT: Sorry, which lines? 20 MR. MAIMON: Lines 2 and 3. There's 21 no -- there's no answer to the question. 22 MR. BERGER: We can edit that. That's 23 not a problem, your Honor. 24 MR. CEDILLO: I think the question was 25 reasked.</p>	<p style="text-align: right;">Page 4810</p> <p>1 to release asbestos, the components of the filter?" 2 That's on 57. 3 And he's not qualified as an expert, and 4 this is giving expert opinion. 5 THE COURT: Okay. So remind me again. 6 Mr. Block was an engineer. 7 MR. CEDILLO: Yes, your Honor. 8 THE COURT: And what was his role again? 9 MR. CEDILLO: He created the machine and 10 he was in charge. 11 THE COURT: The machine that made the 12 cigarettes? 13 MR. CEDILLO: Yes. 14 MR. BERGER: The filter. Because the 15 filter material was so unique, Lorillard had to work 16 with the machine manufacturers to develop 17 filter-making equipment. Mr. Block was the chief 18 engineer of Lorillard at the time involved in the 19 development of that, as well as running the 20 manufacturing process and dealing with quality 21 control during the Micronite time period. 22 THE COURT: So the testimony in this 23 particular case, in this Rosenzweig case in 1998, he 24 was a fact witness, correct, and not an expert? 25 MR. BERGER: Yes.</p>

Colloquy -

<p style="text-align: right;">Page 4811</p> <p>1 MR. CEDILLO: Yes.</p> <p>2 THE COURT: Let me just look through</p> <p>3 these passages.</p> <p>4 MR. CEDILLO: And your Honor, he's</p> <p>5 talking about the photographs from the Longo '95</p> <p>6 report.</p> <p>7 THE COURT: Okay. So when he's talking</p> <p>8 about 8-B. Exhibit 8-B in page 56, line 4, that's</p> <p>9 the Longo photograph he's looking at?</p> <p>10 MR. CEDILLO: Yes, in the '95 Cancer</p> <p>11 Research article.</p> <p>12 THE COURT: The published study.</p> <p>13 MR. CEDILLO: Yes.</p> <p>14 THE COURT: Okay.</p> <p>15 MR. BERGER: And I think while you read</p> <p>16 this, particularly on page 57, you'll see that he</p> <p>17 doesn't answer with expert testimony like what we've</p> <p>18 seen from Dr. Hinds or other witnesses about whether</p> <p>19 the filter would release fibers. He's giving his</p> <p>20 testimony as a fact witness about the filter and how</p> <p>21 it was manufactured and what its characteristics were</p> <p>22 and how it both physically was formed as well as how</p> <p>23 it appeared. So I think it's fact testimony.</p> <p>24 THE COURT: Okay. So as the engineer</p> <p>25 that created the machine that made the filter, he was</p>	<p style="text-align: right;">Page 4813</p> <p>1 objection?</p> <p>2 MR. MAIMON: It's actually -- the</p> <p>3 objection is the animation, your Honor, and I expect</p> <p>4 that they're going to show a computer animation.</p> <p>5 THE COURT: Have you seen the animation?</p> <p>6 MR. MAIMON: I did, your Honor, and I</p> <p>7 don't think there's a qualification for it. It was</p> <p>8 an animation that was created by the lawyers and</p> <p>9 they're asking him to comment about it, and there's</p> <p>10 no foundation laid for it that that animation fairly</p> <p>11 and accurately depicts the condition of the</p> <p>12 compression.</p> <p>13 MR. CEDILLO: Your Honor, I may be</p> <p>14 misremembering. I've had four other court hearings</p> <p>15 since I was last here.</p> <p>16 THE COURT: Oh, no, we should not have</p> <p>17 taken a break.</p> <p>18 MR. CEDILLO: But I thought that the</p> <p>19 objection has already been dealt with. I remember</p> <p>20 Mr. Maimon saying that it made for good theater but</p> <p>21 that it shouldn't come in. This is the animation</p> <p>22 where it shows how the roll collapses on itself and</p> <p>23 goes into a funnel to create it. This is the man who</p> <p>24 created the machine. He's explaining how the thing</p> <p>25 works. And I thought you ruled it was coming in.</p>
<p style="text-align: right;">Page 4812</p> <p>1 there to do test runs on it and correct any issues</p> <p>2 during the relevant time frame, and then produced the</p> <p>3 final product.</p> <p>4 MR. BERGER: Yes, your Honor.</p> <p>5 MR. CEDILLO: And followed up to make</p> <p>6 sure the quality control, the repetition, the mass</p> <p>7 production, was always consistent.</p> <p>8 THE COURT: All right. Give me a few</p> <p>9 moments.</p> <p>10 Based upon the role that Mr. Block</p> <p>11 served in creating the machine that made the filter,</p> <p>12 this is factual testimony and not expert testimony,</p> <p>13 so it all comes in.</p> <p>14 Where to now?</p> <p>15 MR. MAIMON: 60-18 through 61-11, your</p> <p>16 Honor.</p> <p>17 MR. CEDILLO: 60-18 is not designated on</p> <p>18 my copy.</p> <p>19 MR. BERGER: It is.</p> <p>20 THE COURT: It is.</p> <p>21 MR. BERGER: They have previously not</p> <p>22 objected.</p> <p>23 MR. CEDILLO: Oh, you had not objected</p> <p>24 previously. I'm sorry.</p> <p>25 THE COURT: What's the nature of the</p>	<p style="text-align: right;">Page 4814</p> <p>1 MR. MAIMON: I don't think the Court</p> <p>2 dealt with this issue.</p> <p>3 THE COURT: Didn't we already have some</p> <p>4 sort of animation already?</p> <p>5 MR. CEDILLO: Of the manufacturing</p> <p>6 process. This is part of it. I think she ruled on</p> <p>7 that.</p> <p>8 MR. MAIMON: I don't recall -- I have</p> <p>9 not -- not this -- I mean, I didn't raise this</p> <p>10 before.</p> <p>11 MR. BERGER: Mr. Maimon, the entire</p> <p>12 manufacturing process had been objected to, and you</p> <p>13 already overruled the objection.</p> <p>14 MR. MAIMON: The discussion of it. Yes,</p> <p>15 your Honor, dealt with the discussion of it. My</p> <p>16 objection is to an animation where he's already</p> <p>17 described in words above what he did, and now he's</p> <p>18 shown an animation by a lawyer, generated by the</p> <p>19 lawyers, and there's no foundation for an animation</p> <p>20 such as that as required by the rules.</p> <p>21 MR. CEDILLO: Your Honor, it's a</p> <p>22 demonstrative aid. He could stand up and draw it and</p> <p>23 discuss it, or do it much more quickly with a true</p> <p>24 and correct depiction of how it worked. And he says</p> <p>25 all that. I don't understand the nature of the</p>

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<p style="text-align: right;">Page 4815</p> <p>1 objection.</p> <p>2 And I really do think it was dealt with,</p> <p>3 because I remember specifically Mr. Maimon saying how</p> <p>4 it made for great theater but that it shouldn't come</p> <p>5 in.</p> <p>6 MR. MAIMON: This is the first time the</p> <p>7 word "animation" is present in the transcript, so</p> <p>8 this is the first objection. My objection is not to</p> <p>9 his description, which he gave in the previous</p> <p>10 paragraphs and previous pages, my objection is the</p> <p>11 lawyer showing him an animation without following the</p> <p>12 rules about how you qualify an animation. Even a</p> <p>13 demonstrative aid, you have to qualify, and it's not</p> <p>14 qualified yet.</p> <p>15 MR. BERGER: Your Honor.</p> <p>16 THE COURT: Yes.</p> <p>17 MR. BERGER: If you note, plaintiffs are</p> <p>18 not objecting to the relevance of this. And as you</p> <p>19 have read, it appeared you were reading Mr. Block's</p> <p>20 testimony, he goes through and describes what is</p> <p>21 happening in the compression funnel and describing</p> <p>22 the compression ratio. There's nothing in the</p> <p>23 testimony that suggests he thought the animation was</p> <p>24 inaccurate or not representative of that segment of</p> <p>25 the manufacturing process.</p>	<p style="text-align: right;">Page 4817</p> <p>1 animated to show the actual process of the seven</p> <p>2 layers --</p> <p>3 THE COURT: Rolling down.</p> <p>4 MR. CEDILLO: -- rolled up into one,</p> <p>5 going into the funnel, and that's what he's</p> <p>6 describing.</p> <p>7 THE COURT: Okay.</p> <p>8 MR. BERGER: And your Honor, if I may.</p> <p>9 MR. MAIMON: Yeah.</p> <p>10 MR. BERGER: If I can refer the Court</p> <p>11 back to -- you know, at this particular page,</p> <p>12 Mr. Ohlemeyer did not -- the defense lawyer did not</p> <p>13 ask the foundational question, did you prepare this</p> <p>14 animation. But when going through other diagrams and</p> <p>15 depictions of the manufacturing process earlier in</p> <p>16 the transcript, he did.</p> <p>17 So for example, on page -- page 29, when</p> <p>18 he is talking about the master roll process on page</p> <p>19 29, line 19, Mr. Ohlemeyer asks: "Have you prepared</p> <p>20 a drawing of that for us.</p> <p>21 "ANSWER: Yes, I have."</p> <p>22 Or on page 32, lines 3 through 7:</p> <p>23 "Mr. Block, have you also prepared or had prepared at</p> <p>24 your direction an animation of that process, the</p> <p>25 process of creating a master roll?"</p>
<p style="text-align: right;">Page 4816</p> <p>1 THE COURT: Prior to that, in the</p> <p>2 designated lines on line 19 through 20, it says here,</p> <p>3 "You showed us on the exhibit the compression</p> <p>4 funnel." So are the jurors going to see those</p> <p>5 exhibits with the compression funnel?</p> <p>6 MR. BERGER: Yeah. What he -- what it</p> <p>7 is is -- and I'll stand up -- when he had -- when he</p> <p>8 showed the entire manufacturing process going from</p> <p>9 the filter to the conveyor belts to the cutting to</p> <p>10 the compression funnel, and et cetera, is what the</p> <p>11 jurors will see. And so while he is showing how the</p> <p>12 filter material goes down the conveyor belt and ends</p> <p>13 up becoming a filter, he points out the compression</p> <p>14 funnel that is part of that process. So that's what</p> <p>15 he's referring back to. The jurors will have already</p> <p>16 seen the compression funnel in his explanation.</p> <p>17 THE COURT: The exhibits. Okay.</p> <p>18 MR. CEDILLO: The jury has seen it.</p> <p>19 It's coming back now. It was part of Mr. Orcutt's</p> <p>20 video that hasn't been shown. There was a poster</p> <p>21 board which I believe was up on the screen.</p> <p>22 THE COURT: That's what I remember.</p> <p>23 MR. CEDILLO: Yes.</p> <p>24 THE COURT: Right.</p> <p>25 MR. CEDILLO: And that is now being</p>	<p style="text-align: right;">Page 4818</p> <p>1 "ANSWER: Yes."</p> <p>2 So those are just examples throughout</p> <p>3 the transcript where Mr. Block has already said, I</p> <p>4 was involved in preparing the diagrams or the</p> <p>5 animation.</p> <p>6 MR. MAIMON: We don't object to the</p> <p>7 diagrams.</p> <p>8 THE COURT: Is there anything further</p> <p>9 you haven't already articulated?</p> <p>10 MR. MAIMON: No.</p> <p>11 THE COURT: Okay. So here, having</p> <p>12 reviewed the testimony beginning with line 18, and</p> <p>13 the witness talking about exhibits that the jury is</p> <p>14 going to see that show the compression funnel. And,</p> <p>15 yes, here he's shown an animation. There is no</p> <p>16 foundational in terms of did you prepare this.</p> <p>17 However, in reading this testimony, he does not</p> <p>18 say -- he does not testify that it is in any way not</p> <p>19 accurate. In fact, his description of it is that it</p> <p>20 would be accurate.</p> <p>21 So I'm going to allow it in despite that</p> <p>22 lack of asking the witness whether he prepared it and</p> <p>23 is it accurate. By reading the testimony, certainly</p> <p>24 this witness would have indicated if there was a</p> <p>25 problem with it, and he does not. In fact, he says</p>

Colloquy -

<p style="text-align: right;">Page 4819</p> <p>1 here, "Well, here you see how the material goes in 2 and it's folded over and compressed." 3 So he talks about that. And he talks 4 about why it's critical. And so that testimony will 5 come in. 6 Where do we go to now? 7 MR. MAIMON: That was on page 60. 8 Right, Judge? 9 THE COURT: Right, 60, and it goes to 10 61. 11 MR. MAIMON: Sorry. I missed one 12 before. 13 THE COURT: Sure. 14 MR. MAIMON: At page 52, lines 18 15 through 22, is the question, but there's 16 no -- there's no answer to it. 17 THE COURT: 52, what line? 18 MR. MAIMON: Eighteen through 22 is the 19 question. It's restated on 53-16. 20 THE COURT: Okay. I see that. 21 Do you see that, Counsel? 22 MR. CEDILLO: Yes, your Honor. That's 23 fine, your Honor. We'll take 52 -- 24 THE COURT: Eighteen through 22. 25 MR. CEDILLO: Eighteen through 22 is</p>	<p style="text-align: right;">Page 4821</p> <p>1 So if you're going to have a brand that people keep 2 coming to buy, you've got to consistently make it the 3 same way. That's -- that's the connection to it. 4 THE COURT: Got it. Let me just read 5 it. 6 Okay. I'll allow it in for the purpose 7 for which it's being offered. And the question on 8 page 61, line 25, asks him first, "Have you heard of 9 that phrase?" So he says, "Yes." And he says, 10 "Okay. Tell us what it means." 11 And so he tells what it means, and then 12 it goes to the question which goes to this issue of 13 his area, which goes into product development. So 14 for that purpose, it is appropriate and I'll allow 15 it. 16 Where to now? 17 MR. MAIMON: 116. 18 MR. CEDILLO: I have some in between 19 that. Shall we do them? 20 MR. MAIMON: Whatever you want. 21 MR. CEDILLO: We're at page 65 next, 22 your Honor. 23 THE COURT: Okay. So these are the 24 cross-designations? 25 MR. CEDILLO: Yes, and objections that I</p>
<p style="text-align: right;">Page 4820</p> <p>1 out. 2 THE COURT: Okay. Great. And where to 3 now? 4 MR. MAIMON: Now, 61-25. 5 THE COURT: Sixty-one -- 6 MR. MAIMON: Twenty-five. 7 THE COURT: Twenty-five, through where? 8 MR. MAIMON: Through 62-25. 9 THE COURT: And the basis for the 10 objection? 11 MR. MAIMON: The basis is relevance and 12 competency to testify, your Honor. This man is an 13 engineer. He's talking about brand loyalty, which is 14 either marketing or advertising or sales matter. And 15 what he thinks "brand loyal" means is irrelevant. 16 THE COURT: Right. Yes. 17 MR. CEDILLO: Well, your Honor, I think 18 it was a precursor to the question that starts on 19 page 9. 20 THE COURT: Starts on page what? 21 MR. CEDILLO: On line 9 of page 62. The 22 question about "brand loyal" leads to the question at 23 line 9 about consistency in the manufacture of the 24 product promote or help increase brand loyalty. And 25 he is the quality control manufacturing end of it.</p>	<p style="text-align: right;">Page 4822</p> <p>1 have. 2 THE COURT: Hold on. It's now 3 9 o'clock. Ercilyn, why don't you go down at say ten 4 after, and give them time to assemble. 5 Let's go off the record momentarily and 6 let's see if Elias is here. 7 (A discussion is held off the record.) 8 THE COURT: I'm sorry. Mr. Cedillo, you 9 were saying on page 65. 10 MR. CEDILLO: Page 65, your Honor. At 11 lines 21 and half of 22, the identification of Thomas 12 Johnson representing the plaintiffs I think should 13 come in and let the question continue with line 22, 14 "As I understand it, you retired from Lorillard." 15 MR. MAIMON: I think it's important that 16 the jury know that this is cross-examination, your 17 Honor. If it's live testimony, and the predicate for 18 offering this testimony in is that there was fair 19 cross-examination, and if I were to cross-examine, 20 the jury would know that it's cross-examination. 21 THE COURT: I think on the way around it 22 rather than having the introduction is I can 23 certainly tell the jurors, you're going to hear both 24 plaintiff's designations and defendant's 25 designations, so that the cross-examination is coming</p>

Colloquy -

<p style="text-align: right;">Page 4823</p> <p>1 from the plaintiff's attorney. Is that a fair way to 2 resolve this?</p> <p>3 MR. MAIMON: Only if we interrupt the 4 video at this point to say, now we start the 5 cross-examination. I have no pride in it being 6 Mr. Johnson, but I do think that as opposed to just 7 telling them there will be some cross, that this is 8 the cross.</p> <p>9 THE COURT: Anything further?</p> <p>10 MR. CEDILLO: I don't think that's 11 necessary, but whatever the Court wants to do.</p> <p>12 THE COURT: You know what, I'll just 13 leave it in the way it is rather than interrupting 14 the video.</p> <p>15 MR. CEDILLO: Okay.</p> <p>16 THE COURT: Where do we go now?</p> <p>17 MR. CEDILLO: Sixty-six, your Honor, 18 lines 9 through line 4 on page 67. This is all about 19 other Kent testing -- testimony, rather, in other 20 cases. We think it's prejudicial, and he's not an 21 expert witness to be impeached because he's come and 22 given opinion testimony somewhere else.</p> <p>23 MR. MAIMON: This is impeachment, your 24 Honor. It goes to his bias and his credibility with 25 the jury that he is a loyal person to Lorillard and</p>	<p style="text-align: right;">Page 4825</p> <p>1 MR. CEDILLO: Actually, just 14, because 2 15, you're asking him to hold up an exhibit, and then 3 you go on. So it should be 10 through 14.</p> <p>4 MR. MAIMON: Come out?</p> <p>5 MR. CEDILLO: You need 15 and 16.</p> <p>6 MR. MAIMON: I don't care.</p> <p>7 THE COURT: Okay.</p> <p>8 MR. CEDILLO: All right.</p> <p>9 THE COURT: Has our expert arrived?</p> <p>10 MR. CEDILLO: He better be.</p> <p>11 MR. KUSZMERSKI: I saw Dr. Roggli 12 outside, your Honor.</p> <p>13 THE COURT: Where to next?</p> <p>14 MR. CEDILLO: I believe it's 107, your 15 Honor.</p> <p>16 THE COURT: Mr. Maimon, do you have 17 anything before 107?</p> <p>18 MR. MAIMON: No.</p> <p>19 MR. CEDILLO: Line 16 through 25.</p> <p>20 THE COURT: 107, line 16 through 25?</p> <p>21 MR. BERGER: All the way through 109.</p> <p>22 MR. CEDILLO: Goes all the way to 23 109-15.</p> <p>24 THE COURT: Okay.</p> <p>25 MR. CEDILLO: It's relevance and</p>
<p style="text-align: right;">Page 4824</p> <p>1 goes around the country giving testimony for them.</p> <p>2 THE COURT: Anything further?</p> <p>3 MR. CEDILLO: No, your Honor.</p> <p>4 THE COURT: All right. So he is being 5 presented as a fact witness on behalf of Lorillard, 6 and so it doesn't matter that he is not an expert 7 witness. It could go to impeaching credibility. 8 That's what this is setting the stage for in the rest 9 of the questions, I take it.</p> <p>10 MR. MAIMON: Yes, your Honor.</p> <p>11 THE COURT: All right. That stays in. 12 Where to now?</p> <p>13 MR. CEDILLO: I think your ruling just 14 took care of my objection on 69.</p> <p>15 THE COURT: Okay.</p> <p>16 MR. CEDILLO: Page 74. We're okay. I 17 think you've taken care of 74, also.</p> <p>18 76, there's colloquy between counsel 19 that probably should not be designated, at lines 10 20 through 14.</p> <p>21 THE COURT: What's the purpose of that?</p> <p>22 MR. MAIMON: I don't care, your Honor. 23 I didn't specify it. I just didn't break out where 24 it should start. I have no problem with lines 10 25 through 16 coming out.</p>	<p style="text-align: right;">Page 4826</p> <p>1 hearsay, your Honor, and prejudicial. It deals with 2 something called the Wayne memo, which I don't think 3 is in this case -- not yet anyway.</p> <p>4 MR. BERGER: One of the key points, as 5 you see on page 108, your Honor, is this document, 6 the Wayne memo, is written in 1958, so it's after the 7 Kent time period, and it's looking back at the '52 8 to '56 time period. So what they're discussing about 9 what the author wrote in 1958 isn't relevant because 10 the author wasn't there in '52 to '56. So there's no 11 foundation the author was there.</p> <p>12 MR. MAIMON: I wish I would have been 13 that eloquent in making my argument, your Honor, that 14 the 1960 studies that Lorillard asked their experts 15 about and entered into evidence, and the 1964 16 articles by Dr. Selikoff were not relevant to the 17 state of the art at the time. Your Honor ruled that 18 it was relevant to show what was going on at the 19 time, and this is equally as relevant. The fact that 20 this is not an expert witness is of no moment. They 21 offered parts of Dr. First's testimony as fact 22 testimony because he was there at the time. This is 23 a qualified document. It's being shown to the 24 witness and it's being read from.</p> <p>25 THE COURT: Yes.</p>

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<p style="text-align: right;">Page 4827</p> <p>1 MR. CEDILLO: A big difference in the 2 categories that he's describing. My objection, I 3 think, is summarized at page 109 where the payoff 4 question is: "Do you have any idea where the writer 5 of that memo could have gotten the idea that anyone 6 at Lorillard thought it might have been a health 7 concern?" 8 He says, "I have no way of knowing." 9 That isn't a deficiency in 10 state-of-the-art documents that look back, that are 11 the opinions of expert witnesses. It's apples and 12 oranges. The objection here is that the guy is 13 talking about something he doesn't know where anybody 14 got any idea and is being used to sponsor it. That's 15 a big difference. 16 MR. MAIMON: It is a big difference, 17 your Honor, because this witness is a loyal Lorillard 18 witness who -- who wants Lorillard to win. He said 19 so in the transcript, I believe, although that part 20 isn't in. But he's being confronted by their 21 consultant's own words that at the time, namely when 22 they were making it, there were health hazard 23 concerns back in 1952, it was felt in some circles to 24 be a health hazard of its own. 25 THE COURT: Well, here's the problem,</p>	<p style="text-align: right;">Page 4829</p> <p>1 Thank you. 2 "And notice a multitude of corrections 3 on it. Who was the memo sent to, what initials? 4 "Well, it says ES from JJ, and I have no 5 idea who they are." 6 So they're trying to get this document 7 in by getting to the ah-ha moment by someone who 8 seldom crossed paths with him, thinks he was an 9 outside consultant. And so it's improper coming 10 through this witness, so none of this is coming in. 11 Where to now? 12 MR. MAIMON: So that was through -- 13 THE COURT: Through -- 14 MR. MAIMON: 109-15? 15 THE COURT: Correct. 16 MR. CEDILLO: Next, your Honor, minor, 17 at 110, lines 8 through 10, just delete the objection 18 that's designated. It's probably an oversight. 19 MR. MAIMON: No problem. 20 THE COURT: Okay. 21 MR. CEDILLO: Next, your Honor -- 22 MR. BERGER: I think we're back -- 23 MR. CEDILLO: -- I think is plaintiff's, 24 is on 115, maybe -- no, I'm sorry, 116. 25 MR. MAIMON: Yeah, 116 goes back to the</p>
<p style="text-align: right;">Page 4828</p> <p>1 though, through this witness. So the question is 2 asked: "Mr. Block, when you worked at Lorillard, did 3 you ever meet a man by the name of Sidney Wayne? 4 "I saw him in the office a few times. 5 Our paths seldom crossed. 6 "What was -- what was Mr. Sidney Wayne's 7 job with relation to Lorillard? 8 "I think he was an outside consultant 9 for public relations." 10 So here he says he saw him a few times, 11 paths seldom crossed. Thinks he was an outside 12 consultant for PR. 13 "And did you ever -- I've shown you a 14 document that's on the letterhead of Sidney J. Wayne, 15 Incorporated. Correct? 16 "Apparently yes." And he's shown the 17 document. 18 "And it's dated January of 1958. 19 "Correct." 20 Again, he says he's shown the document. 21 "And references Kent filters? 22 "Apparently it is." 23 MR. CEDILLO: Kent's new filter, your 24 Honor. 25 THE COURT: Oh, Kent's new filter.</p>	<p style="text-align: right;">Page 4830</p> <p>1 issue that the Court reserved on, and that is the 2 socializing between Dr. Parmele and Mr. Block, and 3 whether or not he ever saw Dr. Parmele and his wife 4 smoking Kent cigarettes during the 1950s. It's the 5 same issue and will abide the same ruling. 6 MR. CEDILLO: Which I believe you 7 reserved on. 8 THE COURT: I did. 9 MR. CEDILLO: I don't think she ruled 10 on. 11 THE COURT: I did not. 12 MR. CEDILLO: So if you want our 13 position on that again, your Honor. Dr. Parmele is 14 the one that is being shown -- they're showing 15 letters where he says harmful fibers. 16 THE COURT: Um-hum. 17 MR. CEDILLO: They don't -- they don't 18 focus on the absence of or confirm the absence of 19 harmful fibers. But obviously part of plaintiff's 20 approach to this is to show that Dr. Parmele had some 21 knowledge that there were harmful fibers going on. 22 Well, I think an eyewitness account that 23 Dr. Parmele smoked these things, that his wife smoked 24 these things, I think it's only fair to get the other 25 side of the story. If -- if they want to suggest</p>

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<p style="text-align: right;">Page 4831</p> <p>1 that Dr. Parmele was on this campaign because he knew 2 that the filter contained harmful fibers, I think 3 that's belied by the fact that he and his wife were 4 avid smokers, and we have an eyewitness firsthand 5 account telling it, and I think it's relevant and I 6 think it's only fair if they're going to suggest he 7 knew they were harmful, no, he didn't. He was 8 smoking them and his wife was smoking them. 9 MR. MAIMON: First of all, we're not 10 suggesting, your Honor. We are simply reading 11 documents that are Lorillard documents. So it's not 12 that we are suggesting anything, we're not suggesting 13 anything at all. 14 Secondly, Lorillard has gone out of its 15 way in every issue to this Court to remove the whole 16 issue of smoking and health concerns, and so forth. 17 Dr. Parmele was smoking cigarettes which Lorillard 18 knew at the time caused cancer, and we will have a 19 whole host of documents in evidence and witnesses to 20 show that Lorillard, itself, knew that their product 21 caused lung cancer. And that was the prejudice that 22 we talked about. That was the reason, because it 23 injects into the trial a whole host of issues that 24 thus far this defendant has fought like the dickens 25 to keep out.</p>	<p style="text-align: right;">Page 4833</p> <p>1 MR. CEDILLO: That's the replacement 2 filter, your Honor. That's part of that story. 3 THE COURT: All right. Where to now? 4 MR. CEDILLO: I think our next one, your 5 Honor, is on 120, beginning at line 19, going through 6 line 24 on 121. 7 THE COURT: Okay. These are the 8 defendant's objections to plaintiff's designations? 9 MR. BERGER: Yes, your Honor. 10 MR. CEDILLO: Yes, your Honor. 11 THE COURT: What's the basis of the 12 objection? 13 MR. MAIMON: Sorry, 120? 14 MR. CEDILLO: 120-19 through 121-24. 15 Prejudicial and relevance, your Honor. It talks 16 about smoking and cancer. 17 MR. MAIMON: Yes, your Honor. So they 18 want Dr. Parmele's smoking habits to be in because he 19 would never have smoked those if he knew that 20 asbestos was dangerous; but he's smoking them, and 21 everyone knows cancer is a result. You can't have it 22 both ways. 23 MR. CEDILLO: Your Honor, a Readers 24 Digest article about cancer by the carload, talking 25 about cancer and cigarettes, when that smoking and</p>
<p style="text-align: right;">Page 4832</p> <p>1 So if Dr. Parmele and Lorillard knew how 2 dangerous cigarette smoking was, that it causes lung 3 cancer and could kill you -- which they don't want 4 this jury to hear about -- then why was he smoking 5 cigarettes at all? 6 MR. CEDILLO: Well, what he didn't -- we 7 didn't fight like the dickens, your Honor. Their 8 experts and our experts, and everybody almost, 9 stipulated that smoking and lung cancer has nothing 10 to do with mesothelioma. So it wasn't much of a 11 fight. 12 THE COURT: Right. 13 MR. CEDILLO: They agreed to it. And 14 counsel hasn't addressed the very thing that I point 15 out to the Court. They want to show that Parmele had 16 this working knowledge of harmful fibers and so he 17 was working to get it out. This is the other side of 18 the story. 19 THE COURT: I'll allow it in, and on the 20 other part that I had reserved. 21 MR. CEDILLO: Thank you, your Honor. 22 THE COURT: Where to now? 23 Let me ask you, though, a question. 24 This one section on 117 which talks about E-60 and 25 Estron, is that relevant?</p>	<p style="text-align: right;">Page 4834</p> <p>1 health issue, by their expert's own admission, has 2 nothing to do with Mr. Argento's mesothelioma, that's 3 the prejudice and the lack of relevance. 4 MR. MAIMON: But Mr. Cedillo is mixing 5 apples and oranges. He's talking about a causation 6 issue, and they've injected Dr. Parmele's knowledge 7 about the hazards of their own product into this case 8 now. 9 THE COURT: This goes to the notice 10 issue. It stays in. 11 Where to now? 12 MR. CEDILLO: I'm sorry, your Honor. I 13 didn't understand your ruling. 14 THE COURT: It goes to the notice issue. 15 MR. CEDILLO: The notice issue. 16 THE COURT: Where to now? 17 MR. CEDILLO: So that's in? 18 THE COURT: That's in. 19 Where to now? 20 MR. BERGER: I think that's it. 21 MR. CEDILLO: On that transcript, that's 22 it. 23 THE COURT: Can we ask the witness to 24 come in, just in case the jurors come? I would like 25 him to be seated in the back, unless there's</p>

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<p style="text-align: right;">Page 4835</p> <p>1 something else we're going to do.</p> <p>2 MR. CEDILLO: Your Honor, in the next</p> <p>3 transcript, on page 925 of the follow-up transcript.</p> <p>4 THE COURT: Oh, I don't -- do you have</p> <p>5 that follow-up question for me?</p> <p>6 MR. BERGER: Yes, your Honor.</p> <p>7 MR. CEDILLO: There's a question on Old</p> <p>8 Gold.</p> <p>9 THE COURT: Even if it's not marked,</p> <p>10 don't worry about it.</p> <p>11 Okay. So on 925, line 8, through where?</p> <p>12 MR. CEDILLO: To 928, line 7, it's a</p> <p>13 discussion about Old Gold cigarettes, your Honor.</p> <p>14 THE COURT: Okay. And whose designation</p> <p>15 is this?</p> <p>16 MR. CEDILLO: I'm sorry, your Honor?</p> <p>17 THE COURT: Who has designated this</p> <p>18 testimony?</p> <p>19 MR. CEDILLO: The plaintiffs.</p> <p>20 THE COURT: And what's the basis for the</p> <p>21 objection?</p> <p>22 MR. CEDILLO: Outside the scope.</p> <p>23 MR. MAIMON: Outside the scope of what?</p> <p>24 MR. CEDILLO: Anything -- it's about Old</p> <p>25 Gold filter cigarettes, which are not in this case.</p>	<p style="text-align: right;">Page 4837</p> <p>1 issue as to the plaintiff's design defect theory. So</p> <p>2 I'll allow it in for that purpose.</p> <p>3 Are the jurors ready to come in?</p> <p>4 MR. CEDILLO: That's it on Block then?</p> <p>5 THE COURT: Yes, it is.</p> <p>6 (The jury enters the courtroom. The</p> <p>7 following takes place in the presence of the jury.)</p> <p>8 THE COURT: Nice to see you. Hope you</p> <p>9 had a nice week off. Please be seated. Make sure</p> <p>10 your cell phones are turned off. The notebooks are</p> <p>11 right there, if you wouldn't mind passing them</p> <p>12 around.</p> <p>13 And this is the continued trial with</p> <p>14 regard to Valerie Panzarella individually and for the</p> <p>15 Estate of Michael Argento versus Charles B. Chrystal</p> <p>16 Company, et. al., Docket No. 5418-12.</p> <p>17 Could I have appearances, please?</p> <p>18 MS. LONG: Good morning, your Honor.</p> <p>19 Good morning. Amber Long and Moshe Maimon for the</p> <p>20 plaintiffs.</p> <p>21 THE COURT: Thank you.</p> <p>22 On behalf of the defendant Lorillard.</p> <p>23 MR. CEDILLO: Good morning again, your</p> <p>24 Honor. Good morning, ladies and gentlemen. Ricardo</p> <p>25 Cedillo and Steve DeFeo for Lorillard Tobacco</p>
<p style="text-align: right;">Page 4836</p> <p>1 It's the other filter cigarette that we made that did</p> <p>2 not have the asbestos that overlaps the time period.</p> <p>3 THE COURT: Okay. And why is this being</p> <p>4 offered?</p> <p>5 MR. MAIMON: Your Honor, this is</p> <p>6 relevant to the issue of design defect. That they</p> <p>7 had a filter on the market that they were</p> <p>8 manufacturing at the same time which did not have</p> <p>9 asbestos in it. So the feasibility of making such a</p> <p>10 filter was there.</p> <p>11 And with regard also to notice as to</p> <p>12 whether or not you could make such filters, and so</p> <p>13 they were making them. We had plenty of testimony</p> <p>14 about the processes of making both Kents with and</p> <p>15 without asbestos, and now we're talking about a</p> <p>16 simple process to make it also without asbestos.</p> <p>17 THE COURT: Thank you.</p> <p>18 Anything further?</p> <p>19 MR. CEDILLO: It's outside the scope of</p> <p>20 what they had designated on direct examination, your</p> <p>21 Honor.</p> <p>22 MR. MAIMON: That's the problem, your</p> <p>23 Honor, of calling the witness by videotape, that we</p> <p>24 don't get to --</p> <p>25 THE COURT: Yeah. This goes to the</p>	<p style="text-align: right;">Page 4838</p> <p>1 Company.</p> <p>2 THE COURT: Thank you.</p> <p>3 On behalf of the defendant</p> <p>4 Hollingsworth & Vose.</p> <p>5 MR. BERGER: Thank you, your Honor.</p> <p>6 Good morning, everybody. Jim Berger and Steve DeFeo</p> <p>7 on behalf of Hollingsworth & Vose.</p> <p>8 THE COURT: Thank you.</p> <p>9 And on behalf of the defendant Whittaker</p> <p>10 Clark & Daniels.</p> <p>11 MR. DUNST: Good morning, your Honor.</p> <p>12 Good morning, ladies and gentlemen. Alan Dunst and</p> <p>13 Daniel Kuszmerski on behalf of Whittaker Clark &</p> <p>14 Daniels.</p> <p>15 MR. MAIMON: Thank you.</p> <p>16 Okay. So members of the jury, you may</p> <p>17 recall when we were last here we heard some testimony</p> <p>18 of Mr. Orcutt. We're going to interrupt -- I don't</p> <p>19 know that we're finished with that. We are going to</p> <p>20 interrupt that in order to accommodate a witness and</p> <p>21 present to you live testimony.</p> <p>22 The defendants Hollingsworth & Vose and</p> <p>23 Lorillard may now call their next witness.</p> <p>24 MR. CEDILLO: Thank you, your Honor. We</p> <p>25 would call Dr. Victor Roggli at this time.</p>

<p style="text-align: right;">Page 4839</p> <p>1 THE COURT: Good morning, Dr. Roggli. 2 VICTOR ROGGLI, having been duly sworn, testified as 3 follows: 4 THE COURT: Whenever you're ready. 5 DIRECT EXAMINATION BY MR. CEDILLO: 6 Q. Good morning, sir. Would you give us 7 your full name for the record? 8 A. Victor Louis Roggli. 9 Q. And that's R-O-G-G-L-I. 10 A. That's correct. 11 Q. Okay. Dr. Roggli, where do you live, 12 sir? 13 A. I live in Durham, North Carolina. 14 Q. And what do you do for a living? 15 A. I'm a physician that's specifically a 16 pathologist. 17 Q. All right, sir. We're will going to get 18 into a little bit of detail about what all that 19 means. Okay? 20 A. Sure. 21 Q. Let's start with your educational 22 background, please. Where did you receive your 23 undergraduate training, sir? 24 A. I did my undergraduate work at Rice 25 University in Houston, Texas, and received a B.A.</p>	<p style="text-align: right;">Page 4841</p> <p>1 street to Baylor College of Medicine in Houston, and 2 received by M.D. degree from Baylor in 1976. 3 Q. All right, sir. Are you a member or do 4 you hold any professional certifications or licenses, 5 and so forth? 6 A. I do. 7 Q. And we'll get to that. At Baylor 8 College, you ended up being an instructor of some 9 kind? 10 A. Yes. As a chief resident, I was an 11 instructor in pathology. I helped teach the -- the 12 medical students. That was after I had finished my 13 M.D. degree in '76 and was training to be a 14 pathologist from 1976 to 1980. 15 Q. And you are a licensed doctor, sir? 16 A. Yes, sir. 17 Q. And where do you hold licenses? 18 A. In the State of North Carolina. 19 Q. Have you had one in the State of Texas? 20 A. I have, yes. 21 Q. All right. And is your license in the 22 State of Texas current? 23 A. No, it's not. 24 Q. Okay. But the one in North Carolina -- 25 A. North Carolina.</p>
<p style="text-align: right;">Page 4840</p> <p>1 degree in biochemistry and environmental engineering 2 in 1973. 3 Q. And -- 4 THE COURT: I'm sorry. One moment. 5 MR. DEFEO: Could we have the screen? 6 THE COURT: Sorry, Doctor. We were 7 discussing Dr. Roggli's bachelor of arts degree. 8 MR. CEDILLO: Yes, your Honor. And if 9 this thing is working, we will have a nice emblem of 10 Rice University. The Fighting Rice Owls of Houston, 11 Texas. They're better known for their marching band 12 than any athletic team. That's another topic for 13 discussion. 14 THE COURT: You seem ready to discuss 15 it. 16 MR. CEDILLO: No, I'm a Southwest 17 Conference kind of guy. 18 Q. Anyway, Doctor, that's the Rice 19 University we were talking about. Correct? 20 A. That's correct. 21 Q. And you graduated in 1973 with your 22 bachelor's in biochemistry and environmental 23 engineering. And where did you continue your 24 education at that point, sir? 25 A. Well, at that point I went across the</p>	<p style="text-align: right;">Page 4842</p> <p>1 Q. -- is where you work and practice? 2 A. Yes, it is. 3 Q. And your professional certification, 4 what is the American Board of Pathology, sir? 5 A. Well, the American Board of Pathology is 6 an organization that tries to ensure that those who 7 practice the specialty of pathology are competent to 8 do so. And the way they do that is they have certain 9 requirements for your training, certain number of 10 years. So the four years that I had at Baylor 11 College of Medicine satisfied that. 12 Then once you complete your training, 13 you have to take a written examination, which at the 14 time that I did my -- my work in that area, it was a 15 three-day examination. 16 And then if you make a certain minimal 17 score on that exam, then the American Board of 18 Pathology would declare you as being competent to 19 practice their specialty. 20 Q. And what is the American Board of 21 Forensic Medicine, Doctor? 22 A. Well, that's a group that is especially 23 interested in the investigation of -- of 24 circumstances. A lot of times they're related to 25 death, so like a medical examiner would do. Quincy,</p>

<p style="text-align: right;">Page 4843</p> <p>1 for example, that sort of examination. And it's 2 not -- it doesn't include all pathologists, but it 3 does include specialists who are not M.D.s who have 4 expertise in certain areas, like fingerprint 5 analysis, that sort of thing. 6 Q. And are you a member of this Board, sir? 7 A. I am. 8 Q. Okay. Let's talk about your current 9 employment. You are at Duke University, sir? 10 A. I am. 11 Q. And what do you do there? 12 A. I am professor of pathology there. And 13 my work typically involves teaching medical students 14 and residents. I also do research and -- and then I 15 have a consultation service. 16 Q. All right, sir. 17 Let's talk about you being a 18 pathologist. You mentioned the term a couple of 19 times. What does a pathologist do, sir? 20 A. Well, pathology literally means the 21 study of disease. A pathologist is a physician who 22 makes diagnoses either from looking at a sample 23 of -- that a surgeon might take, for example, under a 24 microscope to make a diagnosis; or a pathologist 25 makes diagnoses based on fluid samples sent to the</p>	<p style="text-align: right;">Page 4845</p> <p>1 type of cancer is it, where did it likely come from. 2 Did they biopsy the primary site, or is this likely a 3 spread from some other source. So we help the 4 physicians figure that out. 5 Q. All right, sir. And, Doctor, do you 6 specialize in a particular field of pathology or 7 particular organs? 8 A. I do. 9 Q. And what is that, sir? 10 A. My specialty of area is lung pathology. 11 And I've especially been interested in diseases 12 caused by exposures to dusts, mineral dusts. 13 Q. So the mineral-induced diseases that 14 this jury has heard a little bit about from other 15 witnesses? 16 A. Yes, sir. 17 Q. That's your specialty? 18 A. Yes, sir. 19 Q. All right. And we're going to explore 20 that, sir. 21 What types of minerals can cause lung 22 disease in people, sir? 23 A. Well, there are a number. The one I 24 think that certainly received most publicity in this 25 country is asbestos. Then coal dust can -- can cause</p>
<p style="text-align: right;">Page 4844</p> <p>1 laboratory, such as a blood, urine, or spinal fluid 2 sample. 3 Q. All right, sir. And so what is it that 4 you're actually examining as a pathologist? 5 A. Yeah. So what we do is we get tissues 6 sent to the laboratory. When a surgeon or a 7 physician wants to know what's going on with their 8 patient and they have tissue samples to figure that 9 out, then what they do is send those tissue samples 10 to the laboratory, and those are prepared to make 11 slides and a stain that a pathologist can then look 12 at under a microscope. And that's what we do. And 13 we work with the treating doctors to find out what 14 information is going on to help them come to the best 15 diagnosis. 16 Q. And what is it exactly that you're 17 looking for when you get these tissues and cells 18 under a microscope, sir? 19 A. Well, it depends on what the 20 circumstances are. But in general, we're looking, 21 first of all, is this a cancerous process or a 22 noncancerous process. And if it's not a neoplastic, 23 not a cancerous process, there's a certain pathway we 24 go down to try to figure out what's going on. 25 If it's a cancer, we want to decide what</p>	<p style="text-align: right;">Page 4846</p> <p>1 lung diseases. Exposures to talc can cause some lung 2 diseases. Exposure to silica or quartz, such as from 3 sandblasting, can cause diseases. And there's a 4 variety of less common class of minerals you can be 5 exposed to that can cause lung diseases. 6 Q. And have you particularly focused on 7 studying mineral-induced lung diseases, Doctor, in 8 your career? 9 A. I have. 10 Q. And what types of lung diseases can be 11 caused in humans by minerals, sir? 12 A. Well, there a big general category, what 13 we call of scarring of the -- of the lungs, and 14 there's different patterns of scarring you see with 15 different minerals. So we're looking to see if you 16 can find scars in the tissues and what the pattern 17 is, if we can relate it to a certain type of 18 exposure. 19 For some dusts, like asbestos, there are 20 also cancers that can be caused by the disease. So 21 we're looking to see if we can identify and diagnose 22 those cancers accurately, and then try to determine 23 whether they're asbestos-related. 24 And then for -- especially for asbestos, 25 there's diseases of the pleura, scarring of the</p>

<p style="text-align: right;">Page 4847</p> <p>1 pleura and calcification, what we call pleural 2 plaques. And that's something which we also can look 3 for pathologically, as well as radiographically by 4 X-rays. 5 Q. And I believe other witnesses have 6 informed the jury about the pleura, which is the 7 lining of the lung? 8 A. Yes, sir. 9 Q. That's an accurate description, sir? 10 A. Yes. 11 Q. Now, there's a difference between a 12 cancer that occurs in the lung versus a cancer that 13 occurs in the lining of the lung, the pleura. 14 Correct? 15 A. Yes. 16 Q. And you studied both? 17 A. Yes. 18 Q. Okay. And the disease that attacks the 19 lining of the lung, sir, is that mesothelioma? 20 A. Yes, sir. 21 Q. Okay. Now, what kind of studies have 22 you been involved with regarding asbestos and 23 mesothelioma, just generally? 24 A. Well, I'd say there's two large areas 25 that I've been involved with. One is making the</p>	<p style="text-align: right;">Page 4849</p> <p>1 detail on that in a minute, sir. 2 Let's stay with the diagnostic side as 3 opposed to -- by the way, the second part of what 4 you've dedicated, does that have a term or 5 descriptive words that we can summarize it as, sir? 6 A. Well, I think there's a number of terms 7 you could use. Some people will call it fiber 8 analysis, some would call it digestion study. But 9 those are the categories. 10 Q. All right, sir. Let's stay with 11 diagnosis issues first and then we'll talk about the 12 fiber digestion and fiber analysis, sir. 13 What are the diagnostic issues for 14 mesothelioma, Doctor? 15 A. Well, first, we have to decide is it a 16 malignant process or not. Because it can be 17 difficult to separate mesothelioma from just benign 18 changes that occur from -- let's say you get 19 inflammation, an infection involved in the pleura. 20 The lining cells of the pleura react to that 21 infection. They become very angry-looking and 22 enlarged, and you have to be careful that you don't 23 call that as being a malignancy. So there's a number 24 of ways we can do an approach to make sure we're 25 dealing with a cancer and not a reactive process.</p>
<p style="text-align: right;">Page 4848</p> <p>1 correct diagnosis. So I've been involved in doing 2 studies looking at the various staging procedures 3 that help us separate mesothelioma from other 4 diseases it can be confused with. Because cancers 5 that metastasize or spread to the pleura are a lot 6 more common than mesothelioma is. So you have to 7 make sure you're actually dealing with a 8 mesothelioma, and there's certain procedures you do 9 to try to make that decision. 10 The other area I'm involved with is 11 determining about the causation of mesothelioma, and 12 we've done that in my laboratory by analyzing lung 13 tissue for its types and amounts of asbestos. 14 Q. Okay. The actual diagnosis, there could 15 be experts that disagree whether or not something is 16 mesothelioma. 17 A. That can happen. 18 Q. Okay. And then the other area that 19 you've dedicated your career is actually studying, 20 what, to determine causation? What is it that you 21 actually look at and delve into? 22 A. We look at lung tissue samples and 23 determine the types and amounts of asbestos that are 24 present. 25 Q. Okay. And we'll get into a lot more</p>	<p style="text-align: right;">Page 4850</p> <p>1 And then, as I mentioned, there are many 2 cancers that can spread to the pleura secondarily and 3 mimic a mesothelioma, but actually they're cancers 4 that start from somewhere else. So we need to be 5 able to identify those accurately, as well. 6 Q. And what do you do in dealing with 7 diagnostic issues? Is there a professional 8 association or organization that you belong to that 9 deals specifically with the issues of confusion of 10 cells and getting the right diagnosis, sir? 11 A. Well, there's actually several, I would 12 say. The first one that comes to mind is the 13 U.S./Canadian Mesothelioma Panel, which is a group of 14 12 physicians who have a special interest in the 15 diagnosis of mesothelioma. We act as a referral 16 panel to give second opinions to other doctors who 17 either have difficult cases; or because mesothelioma 18 is a relatively rare disease, a pathologist may not 19 be comfortable making the diagnosis and will send it 20 to us to see if we agree. 21 So there's also an International 22 Mesothelioma Panel which contains members from the 23 U.S./Canadian panel, the French panel, the British 24 panel, the Australian panel and Japanese panel. So 25 I'm a member of that panel, as well.</p>

<p style="text-align: right;">Page 4851</p> <p>1 And also, the Pulmonary Pathology 2 Society, in general, which was formed in about 1995, 3 I believe, is also very interested in the disease of 4 mesothelioma. So we've -- and there's an 5 International Mesothelioma Interest Group Pathology 6 Panel that has written about the diagnosis of this 7 disease, as well. 8 Q. All right. Let's -- let's spend a 9 little time on the U.S./Canadian panel, sir. You 10 said it's made up of 12 members? 11 A. Yes, sir. 12 Q. I'm going to go out on a limb and say 13 it's made up of 12 from the U.S. and Canada together? 14 A. It's close. There's one from the United 15 Kingdom also on the panel. 16 Q. What, you just counted them as part of 17 Canada? 18 All right, sir. And there's only 12 19 that comprise this board? 20 A. Yes. 21 Q. And you're one of them? 22 A. Yes, sir. 23 Q. Is -- I'm not asking you to toot your 24 own horn, but is that a pretty big deal that you sit 25 on a panel like this as a resource for other doctors?</p>	<p style="text-align: right;">Page 4853</p> <p>1 Q. All of them that you mentioned? 2 A. Yes, sir. 3 Q. And the one that's international, how 4 many members make that up, sir? 5 A. I think it's around 15 members. 6 Q. Any of the other gentlemen or ladies 7 from the U.S./Canadian also on the international 8 panel, other than yourself? 9 A. Yes. 10 Q. So it's probably a small group of go-to 11 people that you make yourself available to other 12 doctors to assist in the diagnostic problems that 13 come with mesothelioma? 14 A. Yeah. The International Mesothelioma 15 Panel is a little different because we don't look at 16 individual cases. Instead, we meet every year in the 17 spring with the United States/Canadian Academy of 18 Pathology meeting, and we discuss the interesting and 19 important topics about the disease. So we are more 20 of an -- the International Mesothelioma Panel is more 21 of an academic organization. We publish -- we 22 published a monograph and have -- have been involved 23 with other publications, as well. 24 Q. And on average, how many cases do you 25 get to work on as part of this work, being a member</p>
<p style="text-align: right;">Page 4852</p> <p>1 A. Well, I think so. I think it indicates 2 that I have a recognized expertise in the area, yes, 3 sir. 4 Q. So -- and just on a simple example. 5 There's a doctor or a pathologist somewhere that 6 doesn't know whether or not he's looking at 7 mesothelioma, and he'll send it to you guys, you 12? 8 A. Yes. 9 Q. And then what happens? 10 A. The person who is the chairman of the 11 panel looks at the case; and if it's an easy case, 12 he'll just write a report based on -- based on the 13 panel and send it back. 14 If it's a difficult case, or a very 15 interesting case, he will then send out slides from 16 the case to each of the panel members, and we have a 17 standard form which we fill out about each case and 18 send it back to him. And then he will take the 19 opinions of the group and pass that on to the doctor 20 who referred the case. 21 Q. All right. And then the other 22 organizations that expand beyond the U.S. and Canada 23 that you mentioned, you're a member of those, as 24 well? 25 A. I am.</p>	<p style="text-align: right;">Page 4854</p> <p>1 of these panels, sir, in, say, a 12-month period? 2 A. It varies. I would say maybe we get, 3 these days, Dr. Churg publishes about one case a 4 month maybe. Over the years I've been a member of 5 the panel, I would say that I've probably seen 500 or 6 600 mesotheliomas associated with that. 7 Q. And are you compensated for that, 8 Doctor? 9 A. No. 10 Q. Now, do you have other areas of research 11 in addition to asbestos and mesothelioma? Do you 12 look at other -- other topics, other areas as a 13 researcher? 14 A. Yes. I'd say that -- that of the 15 articles and chapters in books that I've written, 16 95 percent, at least, deal with some aspect of lung 17 pathology. So other aspects of lung pathology, like, 18 diagnosis of lung cancer is an area that I've been 19 interested in. 20 We've mentioned pneumoconiosis, other 21 than asbestos, I've written and published about. So 22 there's been a number of things along those lines. 23 Q. And are you involved in case reports on 24 unique presentations of tumors, for example? 25 A. Sure.</p>

<p style="text-align: right;">Page 4855</p> <p>1 Q. Okay. And you've done case reports on 2 unique types of asbestos exposures? 3 A. Yes. 4 Q. Has that been part of your research 5 throughout the years? 6 A. It has. 7 Q. Okay. And do you do these studies just 8 on individual patients, Doctor? 9 A. Sometimes if it's a very interesting or 10 very rare association, we'll report it in an 11 individual case report. But most of the time it's a 12 group -- a number of different cases that are related 13 in some way that we put together into -- into one 14 study. 15 Q. So you -- you study them in groups or 16 cohorts? 17 A. Typically, yes. 18 Q. While we're on it, do you think a case 19 report is an epidemiological study, Doctor? 20 A. No, it is not. 21 Q. Can a case report, no matter how unique 22 it is, you as a scientist and as a medical 23 researcher, can you think of any reason why an 24 industrial hygienist expert would come here and tell 25 this jury that a single case report can be an</p>	<p style="text-align: right;">Page 4857</p> <p>1 Q. What is a fiber burden analysis, Doctor? 2 A. Well, that's an attempt to determine how 3 much and what types of asbestos are present in lung 4 tissue samples. And it was determined many years 5 ago, in 1968, and then again in 1972, that everybody 6 has some amounts of asbestos in their lungs. And so 7 just simply to say there's asbestos present doesn't 8 mean anything. You have to quantify. You have to 9 compare it with a proper control group. And so that 10 indicates what a fiber burden analysis study is. 11 Q. And when you do a fiber burden analysis, 12 you actually look at lung tissue? 13 A. Yes, we take lung tissue samples. You 14 dissolve them or get -- you've got to get rid of the 15 organic matrix of the lung, itself, in which the 16 fibers are embedded so that you can then look 17 at -- carefully look at the fibers. So you come up 18 with something that will destroy the tissue but not 19 the fibers. 20 And a simple way to do that that is very 21 popular is to use Clorox bleach, just like you can 22 buy off a grocery store shelf, because it will 23 dissolve the lung tissue away and leave the mineral 24 fibers, mineral particles behind. You can then 25 concentrate them on the surface of a filter and study</p>
<p style="text-align: right;">Page 4856</p> <p>1 epidemiological study? 2 A. No, I don't think so. Case reports, 3 I've always been taught it's a suggestion about a 4 possible association. And then once you have the 5 case reports, it's necessary to either do animal 6 studies or epidemiological studies to confirm. It's 7 what we call a hypothesis-generating process. 8 So we find a single case report that 9 says, hey, there may be something going on. We need 10 to do additional studies to see is it, in fact, going 11 on and what are the mechanisms that are causing it to 12 happen. 13 Q. And Doctor, you have done 14 epidemiological studies on asbestos and mesothelioma, 15 have you not? 16 A. I'd say I haven't done the formal 17 epidemiological studies that are -- that are the 18 typical -- typical ones that -- longitudinal studies 19 or cross-sectional studies. But I think that we've 20 looked at very large numbers of cases, so they can be 21 known as descriptive epidemiological studies. 22 Q. All right, sir. 23 Let's talk about the fiber digestion, or 24 I've heard the term fiber burden analysis. 25 A. Yes, sir.</p>	<p style="text-align: right;">Page 4858</p> <p>1 that filter, quantify the amounts of asbestos 2 present. 3 Q. All right. Sir, once you have digested 4 away the tissue and you're left only with the 5 minerals, you look at it how, sir? 6 A. We look at it two ways. One is with the 7 regular light microscope, and count structures that 8 we call asbestos bodies, and those are fibers that 9 have been coated with this golden brown protein iron 10 material that allows us to see it with a regular 11 light microscope. So we use a regular light 12 microscope to count asbestos bodies. 13 And then we use a form of electron 14 microscopy to look at mineral fibers, many of which 15 are too small to be seen with the light microscope, 16 beyond the resolution of the light microscope, and 17 that has an attachment which allows us to determine 18 the actual fibers that are present. We can focus the 19 electron beam on the individual particle or fiber and 20 collect a spectrum of X-rays that tell us what the 21 elemental nature of that fiber is, and that it gives 22 us a fingerprint of what type of fiber that is. 23 Q. And, Doctor, that is a process that you 24 personally are involved in, looking through the 25 microscope and conducting this analysis, sir?</p>

<p style="text-align: right;">Page 4859</p> <p>1 A. It is.</p> <p>2 Q. Okay. And how many lung fiber</p> <p>3 burden -- fiber burden analysis of lungs, how many</p> <p>4 would you estimate you've performed in your career,</p> <p>5 sir?</p> <p>6 A. There's over 2,600 filters that I've</p> <p>7 counted with the light microscope for asbestos body</p> <p>8 counts. And there's more than 1,300 separate cases</p> <p>9 that we've looked at with the electron microscope to</p> <p>10 determine the amount of fibers that are present.</p> <p>11 Q. And, Doctor, currently do you have a</p> <p>12 database of these fiber burden results that you've</p> <p>13 conducted and been involved in?</p> <p>14 A. Yes.</p> <p>15 Q. And when you do a fiber burden analysis,</p> <p>16 do you do it in your lab?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. You don't send that out anywhere,</p> <p>19 you do it yourself. Correct?</p> <p>20 A. Correct.</p> <p>21 Q. Okay. How do you identify the types of</p> <p>22 asbestos fibers or the minerals that -- particles</p> <p>23 that you're looking at? What process do you use to</p> <p>24 actually identify the specific particles and types of</p> <p>25 minerals that are being examined?</p>	<p style="text-align: right;">Page 4861</p> <p>1 to follow, and -- and in order -- and it's tedious to</p> <p>2 do. It's time-consuming. Takes an ability to</p> <p>3 concentrate. And I think that people who have a</p> <p>4 little bit of obsessive compulsive disorder are</p> <p>5 probably better at doing it than others. That's me.</p> <p>6 I have a little bit of OCD.</p> <p>7 So, yeah, it's tedious and it's</p> <p>8 difficult and time-consuming to do, but</p> <p>9 it's -- it's -- it's a recipe, and it's pretty easy</p> <p>10 to follow.</p> <p>11 Q. And this database that you've compiled</p> <p>12 with these thousands of fiber burden cases that</p> <p>13 you've examined, sir, what kind of information are</p> <p>14 you compiling to create this database?</p> <p>15 A. Well, we have information about who the</p> <p>16 patient is, when we wrote our report, who sent it to</p> <p>17 us, whether it's from a plaintiff attorney or a</p> <p>18 defense attorney, or from another doctor. It</p> <p>19 has what the Duke number was, what the specimen</p> <p>20 number is, because we give a number to each pathology</p> <p>21 specimen that comes into the laboratory. And of</p> <p>22 course, the hospital it came from has its own</p> <p>23 specimen number, so we have that number also in the</p> <p>24 database.</p> <p>25 I think I mentioned the daily report.</p>
<p style="text-align: right;">Page 4860</p> <p>1 A. Well, I started doing this in 1976 when</p> <p>2 I was still a resident in training in pathology. So</p> <p>3 the first thing we had to do was get samples of known</p> <p>4 asbestos that we could analyze and see what sort of a</p> <p>5 fingerprint you'd expect, or spectrum you'd expect to</p> <p>6 get from them. So we did that. And there were some</p> <p>7 samples called UICC samples that you can write off</p> <p>8 for and get.</p> <p>9 And then, once you know what the</p> <p>10 asbestos fiber types, various asbestos fiber types</p> <p>11 look like with the spectrum, then you can find the</p> <p>12 fibers with the electron microscope. And you focus</p> <p>13 your electron beam and you collect a spectrum that</p> <p>14 tells you what the composition of that fiber actually</p> <p>15 is.</p> <p>16 Q. And then you've got the sample that</p> <p>17 you've broken down and analyzed, and you get to match</p> <p>18 them up to see what it is that you actually examined</p> <p>19 and looked at.</p> <p>20 A. Correct.</p> <p>21 Q. Okay. Is it -- is it an easy process to</p> <p>22 be able to look at mineral particles and determine</p> <p>23 what type of asbestos it is, sir?</p> <p>24 A. Well, it's -- it's really not rocket</p> <p>25 science. But there's certain procedures you've got</p>	<p style="text-align: right;">Page 4862</p> <p>1 Then we also have the diagnosis of the patient. Any</p> <p>2 additional diagnosis that might be of importance.</p> <p>3 We have information about what the</p> <p>4 person's exposure was and how long they were exposed.</p> <p>5 And we have information about if they smoked and how</p> <p>6 much they smoked; and if they quit, when they quit.</p> <p>7 We have information about if they had</p> <p>8 the disease asbestosis, which is scarring of the</p> <p>9 lungs from asbestos; if they have the disease pleural</p> <p>10 plaques; whether or not we did a fiber analysis. And</p> <p>11 from those that we did a fiber analysis on, then</p> <p>12 there's a whole string of columns of information we</p> <p>13 fill in based on what we found.</p> <p>14 Q. And over what period of time have you</p> <p>15 been compiling or adding to this database, Doctor?</p> <p>16 A. Well, I collected the cases. I think</p> <p>17 the very first cases that I had in my files was from</p> <p>18 about 1981, not very long after I got to Duke. And I</p> <p>19 saved files on those cases, and when I met my -- my</p> <p>20 wife in 1990, she was much more computer savvy than I</p> <p>21 was, so she helped me develop a database that would</p> <p>22 allow me to put information about the cases in. So</p> <p>23 that's when I started, in 1990.</p> <p>24 So from that point on, I added the new</p> <p>25 cases in. And then every week I'd try to go through</p>

<p style="text-align: right;">Page 4863</p> <p>1 ten of the old files and add them in until I caught 2 up to present day. 3 And then around 2000 we converted to 4 another type of database which is much more 5 user-friendly and compatible with Microsoft 6 documents. And so I continued to add the cases as we 7 get them. 8 And another thing about the database is 9 it's a living database. If I get new information 10 about a case in that I didn't have before, then I can 11 change what was in the database before by putting 12 that new information in. 13 Q. Doctor, what role has that database had 14 in terms of your research you've done to advance 15 medical and scientific knowledge? 16 A. Well, the research questions 17 that -- that we study, they come from up here. They 18 come from the experience that I have working with the 19 cases, looking at cases. I may say, you know, it 20 seems that this is something that is happening that 21 we're seeing here, we should study this and look and 22 see if that's the case or not. It's sort of a 23 hypothesis-generating process. 24 The database actually serves -- it's a 25 convenience for going and rapidly finding the</p>	<p style="text-align: right;">Page 4865</p> <p>1 papers; and if so, how many? 2 A. In the peer-reviewed literature, I think 3 there's more than 200 papers on my CV that have 4 either been published or accepted for publication in 5 the scientific literature. 6 Q. And have any of these publications been 7 on asbestos and asbestos-related diseases? 8 A. I would say about half, or a little more 9 than half, have something to do with asbestos or 10 asbestos-related diseases. 11 Q. When is the first time you published on 12 asbestos and asbestos-related disease, Doctor? 13 A. I think it was 1979 or 1980. 14 Q. When did you get your medical degree? 15 A. 1976 I got my medical degree, and 16 finished my residency training in 1980. 17 Q. So right about the time you finished 18 your residency, you were already publishing in this 19 area? 20 A. Yes. 21 Q. Okay. And have you published any books 22 on asbestos or asbestos-related diseases, Doctor? 23 A. I have. 24 Q. Okay. What is the Pathology of 25 Asbestos-Associated Diseases?</p>
<p style="text-align: right;">Page 4864</p> <p>1 information without having to go back to an entire 2 file and go through it all over again, reinventing 3 the wheel, so to speak. So I look at it as being a 4 convenience, a shortcut. 5 Q. Sure. 6 Now, Doctor, let's move on to another 7 general topic. 8 During your career, and as a result of 9 this research that you've generally described, sir, 10 have you learned about the use of the different types 11 of asbestos fibers in products? 12 A. I have. 13 Q. Okay. And have you learned about the 14 use of the different fiber types of asbestos in the 15 workplace? 16 A. Yes. 17 Q. And you've mentioned and the jury has 18 heard some about electron microscopy. Is that 19 something that you've worked hands-on with? 20 A. It is. 21 Q. And consider yourself competent and 22 capable in that area, as well? 23 A. Yes, sir. 24 Q. Okay. Now, let's talk about your 25 publications, sir. Have you published scientific</p>	<p style="text-align: right;">Page 4866</p> <p>1 A. Well, that's a textbook that I first put 2 together with two of my mentors, Dr. Greenberg and 3 Dr. Pratt. And I think it was about 1987 that I 4 started working on it, because I was working on 5 medicolegal cases, and the reports, I had to put all 6 these different references, and I thought, boy, it 7 sure would be nice if all of these were in one place. 8 And I thought, we should write a book and put it in 9 one place. So I spent about five years putting the 10 book together with my two mentors, and it was 11 published in 1992, was the first edition. 12 Then our second edition came out in 13 2004, which I published with a couple of my trainees. 14 And then in 2014 the third edition came 15 out with those same two trainees. 16 Q. All right, sir. I have the third 17 edition here. I may refer to it, so let me put it up 18 there for you. 19 And who uses this book? How do you find 20 it? 21 A. Well, since it talks about pathology, 22 pathologists would refer to it. I think any doctor 23 who is dealing with a case of -- of possible 24 asbestos-related disease could -- could find some 25 useful information there. People who do research in</p>

<p style="text-align: right;">Page 4867</p> <p>1 the area may refer to it, and that would include 2 radiologists who are interested in asbestos or lung 3 diseases. Pulmonologists, pathologists. So there's 4 lots of different specialties that have been 5 involved. But I've often been told that I sold more 6 copies of the book to lawyers than anybody else. 7 Q. Including this one. 8 Doctor, you said the first edition was 9 with your mentors. Who are your co-authors in this 10 third edition, sir? 11 A. The third edition, the co-authors are 12 Tim Oury, who was my first trainee in 1996; and Dr. 13 Tom Sporn, who was my second trainee in 1997. 14 Q. And what topics are generally covered in 15 this third edition, sir, the current one? 16 A. Well, we try to cover everything 17 asbestos-related. The first chapter, we say what 18 asbestos is. 19 The second chapter is more or less where 20 you can get exposed to asbestos. 21 The third chapter is dedicated to 22 talking about asbestos bodies that I mentioned 23 earlier. 24 The fourth chapter talks about the 25 disease asbestosis.</p>	<p style="text-align: right;">Page 4869</p> <p>1 treated? 2 A. Yes. In many of the chapters there is a 3 section called "Historical Background," which sort of 4 gives the basic information. On asbestosis, for 5 example, when did we first learn about asbestosis and 6 when were the first publications, when was the term 7 first used in literature. So that information is in 8 there, yes. 9 Q. So in addition to historical use of 10 asbestos, you would find in your book the development 11 of the scientific and medical knowledge about 12 asbestos, Doctor? 13 A. To some degree, yes, sir. 14 Q. Okay. And would you have discussions in 15 there on the types of asbestos that have been used in 16 the United States? 17 A. Yes. 18 Q. Okay. And how people have been exposed 19 to asbestos, including occupations and 20 asbestos-containing products. Is that a topic that 21 we would find there? 22 A. Yes. 23 Q. And how asbestos fibers enter the body 24 and the effects of asbestos fibers on humans and in 25 animal research. Would that be a topic covered</p>
<p style="text-align: right;">Page 4868</p> <p>1 The fifth chapter talks about the 2 disease mesothelioma, specifically about the 3 diagnosis and causation of that disease. 4 Chapter 6 deals with benign pleural 5 diseases, like pleural plaques that I mentioned 6 previously. 7 Chapter 7 deals with lung cancer. 8 Chapter 8 deals with other cancers that 9 have been suggested to be associated with asbestos. 10 Chapter 9 deals with the use of 11 cytopathology, which is a special branch of pathology 12 that looks at individual cells rather than tissue, 13 and how it can be useful in asbestos-related 14 diseases. 15 Chapter 10 talks about experimental 16 animal studies, what they helped us to learn about 17 asbestos. 18 Chapter 11 talks about fiber analysis. 19 Then the last two chapters are written 20 by lawyers, one by plaintiff's side, the other by the 21 defense side, talking about how they see pathology as 22 being helpful to their cases. 23 Q. Okay. And throughout the various topics 24 that you've listed in all these chapters, sir, would 25 the topic of the historical uses of asbestos be</p>	<p style="text-align: right;">Page 4870</p> <p>1 there? 2 A. Yes, sir. 3 Q. And are all those topics that you're 4 knowledgeable and comfortable discussing with us if I 5 were to ask you some questions about it? 6 A. Sure. 7 Q. Okay. Are there any other books on 8 asbestos or asbestos-related diseases that you've 9 published, sir? 10 A. I've published other books that -- that 11 deal somewhat with that issue. We -- one of my 12 colleagues and I published two editions of a book. 13 One book called Microprobe Analysis in Medicine, 14 which is basically that technique I was telling you 15 about, identifying a particle under a microscope and 16 figuring out what its elemental composition was, its 17 fingerprint was from a spectrum. So that book deals 18 with that issue and how it's used in pathology in 19 general, especially lung pathology. 20 And the second edition of that book was 21 called Biomedical Applications of Microprobe 22 Analysis. And both of those have sections in them 23 about asbestos. 24 Q. Okay. What about "The Pathology of 25 Malignant Mesothelioma"? Is that a publication that</p>

<p style="text-align: right;">Page 4871</p> <p>1 you were involved in?</p> <p>2 A. "Pathology of Malignant Mesothelioma," I</p> <p>3 believe, was a monograph that was put together by</p> <p>4 members of the International Mesothelioma Panel. I</p> <p>5 mentioned that we were mainly a research panel, that</p> <p>6 we met on a yearly basis. And the chairman of the</p> <p>7 panel was involved with putting the book together,</p> <p>8 but each of us had a contribution which we wrote</p> <p>9 into -- I have called it a monograph, in that it's a</p> <p>10 very limited focused topic but goes into great detail</p> <p>11 on it.</p> <p>12 Q. All right, sir.</p> <p>13 New topic, Doctor. Can you tell us what</p> <p>14 the Helsinki Symposium on Asbestos, Asbestosis and</p> <p>15 Cancer, what was that? What is that?</p> <p>16 A. Yes, that met initially in January of</p> <p>17 1997 in Helsinki, Finland. And there were 19 people</p> <p>18 around the world who were invited to participate in</p> <p>19 that meeting, and I was one of the individuals who</p> <p>20 participated in that.</p> <p>21 And so we met for three days in Helsinki</p> <p>22 to try to come to a consensus about how do you</p> <p>23 diagnose asbestos-related diseases and how do you</p> <p>24 determine when asbestos is the cause.</p> <p>25 Q. Now, you said there were 19</p>	<p style="text-align: right;">Page 4873</p> <p>1 A. Yes.</p> <p>2 Q. And when was it first published?</p> <p>3 A. 1997.</p> <p>4 Q. And has it been in effect or in use</p> <p>5 since that time, sir?</p> <p>6 A. Yes. And we met again in February of</p> <p>7 2014, and there were certain topics which we</p> <p>8 addressed and updated, and that was also published as</p> <p>9 a monograph, and then as an article which was a</p> <p>10 summary of what the monograph says.</p> <p>11 Q. And we've got the cover of one that has</p> <p>12 a 2014 in its title. Is that the most recent one,</p> <p>13 sir?</p> <p>14 A. It is.</p> <p>15 Q. And, again, you've been involved with</p> <p>16 them since they first met back in the '90s?</p> <p>17 A. Yes.</p> <p>18 Q. All right, Doctor.</p> <p>19 Now, you work at Duke University.</p> <p>20 Correct?</p> <p>21 A. Yes.</p> <p>22 Q. Do you have any other duties at Duke in</p> <p>23 addition to this diagnostic work that you've been</p> <p>24 describing, sir?</p> <p>25 A. Yeah. I think I mentioned earlier that</p>
<p style="text-align: right;">Page 4872</p> <p>1 internationally?</p> <p>2 A. Yes.</p> <p>3 Q. And you were one of them?</p> <p>4 A. Yes.</p> <p>5 Q. How many of that 19 were from the United</p> <p>6 States?</p> <p>7 A. Four.</p> <p>8 Q. So you are one of four from this country</p> <p>9 that participated in this symposium?</p> <p>10 A. Correct.</p> <p>11 Q. All right, sir. And what -- what were</p> <p>12 you trying to accomplish or what was your goal and</p> <p>13 objective, and did you meet it?</p> <p>14 A. Yeah. I think we did meet it. We were</p> <p>15 trying to determine how do you go about diagnosing</p> <p>16 asbestos-related diseases, which -- which we wrote a</p> <p>17 monograph about 100 pages long that details about</p> <p>18 that, with a number of chapters in that monograph.</p> <p>19 And then about how to determine when</p> <p>20 the -- when the disease is related. And I think we</p> <p>21 gave some good general guidelines for other</p> <p>22 physicians to use.</p> <p>23 Q. So it's -- it's a published criteria now</p> <p>24 of attribution of asbestos-related diseases you might</p> <p>25 find in people?</p>	<p style="text-align: right;">Page 4874</p> <p>1 I'm involved as a teacher. I teach medical students</p> <p>2 and residents in training, which we have a residency</p> <p>3 program for training individuals to become</p> <p>4 pathologists. And I also do the research work.</p> <p>5 Q. All right, sir. And you teach pathology</p> <p>6 to medical students?</p> <p>7 A. I do.</p> <p>8 Q. And how long have you been doing that at</p> <p>9 Duke, sir?</p> <p>10 A. Thirty-one years.</p> <p>11 Q. Now, are you part of any other</p> <p>12 professional organization other than the</p> <p>13 U.S./Canadian Mesothelioma Panel that we've</p> <p>14 discussed, sir?</p> <p>15 A. Yes.</p> <p>16 Q. I think you mentioned the International</p> <p>17 Mesothelioma Panel?</p> <p>18 A. Yes.</p> <p>19 Q. What is the American College of Chest</p> <p>20 Physicians?</p> <p>21 A. That is a college of physicians who are</p> <p>22 especially interested in diseases of the chest. That</p> <p>23 would include surgeons who are members of that.</p> <p>24 Radiologists are members. Pulmonologists are</p> <p>25 members. Occupational medicine doctors are members,</p>

<p style="text-align: right;">Page 4875</p> <p>1 and pathologists, as well. 2 Q. And are you a member of that 3 organization? 4 A. Yes. 5 Q. What is the Microscopy Society of 6 America, MSA? 7 A. Yeah, that's an organization which is of 8 individuals who use microscopic techniques for 9 different purposes. Maybe for forensic purposes. It 10 may be for teaching purposes. It may be for 11 diagnostic purposes. 12 Q. And is that the one that you've got to 13 be diagnosed as obsessive compulsive before you can 14 join? 15 A. You don't have to be, but I think it 16 helps. 17 Q. All right, sir. You've told us about 18 the International Mesothelioma Panel a little 19 earlier, did you not? 20 A. Yes. 21 Q. All right, sir. And you're a member of 22 all these organizations and have been for many years? 23 A. Yes. 24 Q. All right, sir. 25 Now, you've been studying</p>	<p style="text-align: right;">Page 4877</p> <p>1 patients at Duke, private patients at Duke, unless 2 they were referred to us to do a fiber analysis. And 3 then they're probably in the database. If I did a 4 fiber analysis, they are in the database. 5 And then the cases of the U.S./Canadian 6 Mesothelioma Panel are not in my database, no. 7 Q. All right, sir. And have you 8 specifically published in the medical and scientific 9 literature on topics where your database was used as 10 a resource? 11 A. Yes. 12 Q. Tell us about that, if you could 13 quickly, sir. How have you used the database to 14 publish articles on asbestos-associated diseases? 15 A. Well, in 1993, I wrote a paper with a 16 couple of my colleagues saying that amosite is the 17 main type of asbestos fiber that you find in 18 mesothelioma patients in the United States. And that 19 was a study of 94 patients. It was very heavily 20 loaded with people who were insulators or shipyard 21 workers. So even though amosite was the main fiber 22 type, I was a bit concerned that -- that that may 23 have been heavily influenced by the fact that we had 24 lots of insulators and lots of shipyard workers. So 25 I had a fellow who -- who was working with me, my</p>
<p style="text-align: right;">Page 4876</p> <p>1 asbestos-associated diseases for about, what, 2 40 years now? 3 A. Correct. 4 Q. All right, sir. And how many 5 mesothelioma cases would you estimate that you've 6 reviewed in this 40-year time span, Doctor? 7 A. In my own private consultation files, 8 last week we hit case number 4,000 of mesotheliomas 9 that I've seen in consultation. 10 And in addition, I think I mentioned 11 five or six hundred additional cases I've seen with 12 the U.S./Canadian Mesothelioma Panel. Only a very 13 few of those overlap with the cases in my 14 consultations files. 15 And then probably another 100 or 200 16 that I've seen over the years, the 35 years I've been 17 at Duke and the VA. 18 Q. Duke and the VA? 19 A. Yeah, Durham VA Hospital. I actually 20 was there from 1980 to September of 2006. 21 Q. All right, sir. 22 And are all these cases that you've just 23 described, have they made their way into your 24 database? 25 A. The 4,000 have. Not the cases that are</p>	<p style="text-align: right;">Page 4878</p> <p>1 third fellow in training, who was interested in a 2 project. And it turned out that she had access to 3 someone, her husband, who was a computer ace and who 4 could take my old archaic database and upgrade it 5 into a much more user-friendly form. And so we asked 6 the question, okay, let's look at the occupational 7 groups of mesothelioma and see how they are 8 classified, and then look at the cases where we've 9 done fiber analysis in those cases and see if amosite 10 continues to be a main cause of asbestos in the 11 United States regardless of what the occupational 12 category is. 13 So we asked that question. The database 14 was then able to find the patients for which we had 15 diagnosed mesothelioma and for which we knew 16 something about their exposure information, there was 17 something entered under "Exposure" column, and that's 18 how the study proceeded. 19 Q. All right, sir. And that study was in 20 the '90s, I think you said? 21 A. It was about right around 2000, because 22 I think we finished the study in 2001. It was 23 published in 2002. 24 Q. Okay. And in 2002, did you publish the 25 article that's referred to in the scientific and</p>

<p style="text-align: right;">Page 4879</p> <p>1 medical literature as the 1,445 case article?</p> <p>2 A. Yes.</p> <p>3 Q. What was that one, sir?</p> <p>4 A. That was the one I was just talking</p> <p>5 about where we had 1,445 mesothelioma patients where</p> <p>6 we knew something about what their exposure</p> <p>7 information was. So then we could see what sort of</p> <p>8 categories these cases fell into, and look into more</p> <p>9 detail as to what we found in terms of diseases they</p> <p>10 had, accessory conditions they had, and what fiber</p> <p>11 analysis showed.</p> <p>12 Q. And the jury has heard from others, and</p> <p>13 I'm confident you'll agree, sir, that asbestos is a</p> <p>14 cause of mesothelioma.</p> <p>15 A. Yes, sir.</p> <p>16 Q. And in your experience based on the</p> <p>17 research you've conducted, the database that you've</p> <p>18 maintained, and so forth, do asbestos-caused</p> <p>19 mesotheliomas tend to occur in any particular group</p> <p>20 or groupings of people?</p> <p>21 A. Yes. One of the interesting things we</p> <p>22 found from the study is that over 90 percent of our</p> <p>23 cases fit into one of 12 industries, one of six</p> <p>24 occupations, or one particular nonoccupational group.</p> <p>25 And the study was really a limited number of types of</p>	<p style="text-align: right;">Page 4881</p> <p>1 mesothelioma other than asbestos?</p> <p>2 A. Sure.</p> <p>3 Q. They do exist?</p> <p>4 A. Yes.</p> <p>5 Q. And what are some of these other causes</p> <p>6 that may be out there, sir?</p> <p>7 A. Well, it's well recognized that</p> <p>8 radiation, prior radiation, therapeutic radiation is</p> <p>9 a cause of mesothelioma. We actually just published</p> <p>10 a study last year looking at people who have had one</p> <p>11 type of cancer that's common in childhood or young</p> <p>12 adults for which they almost always get radiation.</p> <p>13 There's a high percentage of cures, and so there's a</p> <p>14 high percentage that live another 20 or 30 years, and</p> <p>15 a significant number of those were developing</p> <p>16 mesothelioma. So that's one recognized cause is</p> <p>17 therapeutic radiation.</p> <p>18 Another is other mineral fibers that are</p> <p>19 not classified as asbestos; but from looking under a</p> <p>20 microscope, they have a lot of features that are</p> <p>21 similar to asbestos. One is called erionite.</p> <p>22 Another one is called fluoro-edenite.</p> <p>23 The erionite has been mainly causes of</p> <p>24 mesothelioma in the country of Turkey, and the</p> <p>25 fluoro-edenite in the country of Sicily.</p>
<p style="text-align: right;">Page 4880</p> <p>1 exposures out there that were accounting for almost</p> <p>2 all of the 1,445 mesotheliomas that we studied.</p> <p>3 Q. And how would you describe the physical</p> <p>4 characteristics of the people that are getting</p> <p>5 asbestos-associated diseases, sir, by gender?</p> <p>6 A. First of all, we found -- and it's not</p> <p>7 unexpected at all -- the vast majority were men,</p> <p>8 because historically men were the ones who were</p> <p>9 involved in the occupations where there was a</p> <p>10 significant exposure to asbestos.</p> <p>11 And secondly, the vast majority of them</p> <p>12 were pleural mesotheliomas, because that's by</p> <p>13 far -- the ones that occur in the chest are the ones</p> <p>14 by far are the most common mesotheliomas.</p> <p>15 Q. And so for the men who have</p> <p>16 mesothelioma, sir, what percentage is caused by</p> <p>17 exposure at the workplace?</p> <p>18 A. What we found by analyzing lung tissue</p> <p>19 samples is that 86 percent of our men with pleural</p> <p>20 mesothelioma have an abnormal elevated asbestos</p> <p>21 content, and the vast majority of those were from</p> <p>22 workplace exposure.</p> <p>23 Q. All right.</p> <p>24 Now, during these four decades of work</p> <p>25 in this field, sir, have you identified causes of</p>	<p style="text-align: right;">Page 4882</p> <p>1 Then there are cases that are related to</p> <p>2 inflammation, chronic inflammation for long periods</p> <p>3 of time. One disease that can cause chronic</p> <p>4 inflammation in tissues for a long period of time is</p> <p>5 tuberculosis. So it's been recognized that some</p> <p>6 people get tuberculosis involving the pleural space</p> <p>7 that just smolders there for decades. And a few of</p> <p>8 those patients have gone on to develop mesothelioma</p> <p>9 in those areas. So chronic inflammation is thought</p> <p>10 to be a precursor in some cases.</p> <p>11 Q. The jury has heard from others, let me</p> <p>12 ask you the question. During your decades-long study</p> <p>13 of mesothelioma, have you learned whether cigarette</p> <p>14 smoking can cause mesothelioma?</p> <p>15 A. Yes.</p> <p>16 Q. And can it?</p> <p>17 A. No, I don't think it's -- it does not</p> <p>18 have an effect on mesothelioma. Someone suggested</p> <p>19 that what happens in cigarette smoking, it interferes</p> <p>20 with normal clearance mechanisms, so that can result</p> <p>21 in more fibers than usual in the lung. But cigarette</p> <p>22 smoking also causes your airways to become narrower</p> <p>23 and have a thicker mucus blanket, so that can cause</p> <p>24 less fibers to get to the periphery of the lung. So</p> <p>25 you don't know which of those is more important, and</p>

<p style="text-align: right;">Page 4883</p> <p>1 epidemiological studies show no effects of smoking on 2 lung cancer rates. So apparently those two factors 3 are a wash, they cancel each other out. 4 Q. And then just to close out the subject, 5 sir. Are there some causes of mesothelioma that you 6 just cannot explain the cause? 7 A. Yes. 8 Q. And what do you call those, and do they 9 occur? 10 A. Yes. In our database, my database, 11 about 14 percent of mesotheliomas in men and 12 16 percent of all the mesotheliomas that we have 13 are -- have asbestos contents not different from a 14 control population. No evidence they're 15 asbestos-related. And those are called idiopathic or 16 spontaneous mesotheliomas. 17 Q. All right, Doctor. 18 Now, sir, you're here to give some 19 opinion testimony to questions that I ask you. Is 20 that correct? 21 A. Yes, sir. 22 Q. Doctor, can we agree that any of your 23 answers that you're giving and opinions that you're 24 going to offer, you're going to give those answers 25 today within a reasonable degree of scientific and</p>	<p style="text-align: right;">Page 4885</p> <p>1 A. Yes. 2 Q. And based on your research and 3 experience, do you understand the potential causes of 4 mesothelioma, Doctor? 5 A. Yes. 6 Q. And based on your research and 7 experience, do you understand the types of asbestos 8 fiber exposures that are associated specifically with 9 mesothelioma? 10 A. Yes. 11 Q. Are you familiar with the historical 12 progression of the science on the levels and types of 13 asbestos exposures that are associated with disease? 14 A. Yes. 15 Q. And are you familiar with how the human 16 body processes inhaled particles and fibers? 17 A. Yes. 18 Q. And have you reviewed the medical 19 records of Mr. Argento, the plaintiff in this case? 20 A. I have. 21 Q. And have you reviewed the deposition 22 testimony and other materials that describe 23 Mr. Argento's smoking history and potential asbestos 24 exposure? 25 A. I have.</p>
<p style="text-align: right;">Page 4884</p> <p>1 medical certainty, Doctor? 2 A. Yes, sir. 3 Q. We can agree on that? 4 A. Yes, sir. 5 Q. And I'm going to ask you now a series of 6 questions to establish the summary of what I'm going 7 to be offering you as an expert on. Okay? 8 A. Sure. 9 Q. So in conjunction with your own 10 research, Doctor, your own publishing and your 11 teaching, do you study the medical and scientific 12 research and literature related to asbestos and 13 disease? 14 A. I do. 15 Q. And based on your research and 16 experience, are you familiar with the types and 17 characteristics of asbestos fibers? 18 A. I am. 19 Q. And are you familiar with the historical 20 uses of different types of asbestos fibers in 21 different categories of products? 22 A. Yes. 23 Q. And are you familiar with the types of 24 asbestos fibers commonly found in different kinds of 25 workplaces and in environments historically?</p>	<p style="text-align: right;">Page 4886</p> <p>1 Q. And have you reviewed materials 2 regarding the analysis of the original Kent 3 cigarettes by Dr. William Longo? 4 A. I have. 5 MR. CEDILLO: Your Honor, at this time I 6 would offer Dr. Roggli as an expert witness on the 7 subjects of lung pathology, asbestos and 8 asbestos-associated disease. 9 THE COURT: Any objection? 10 MR. MAIMON: No objection. 11 MR. DUNST: No objection, your Honor. 12 THE COURT: Okay. This witness is now 13 qualified as an expert in lung pathology, asbestos 14 and asbestos-related disease. 15 MR. CEDILLO: Thank you, your Honor. 16 THE COURT: You know what? Rather than 17 interrupt your direct, because we're close to our 18 break time, we'll take the morning break now. 19 Fifteen minutes. Leave your notebooks here. 20 Remember all the instructions I've provided during 21 the course of this trial. A member of my staff will 22 pick you up downstairs at 10:30. 23 (The jury leave the courtroom.) 24 THE COURT: All right. And we're off 25 the record. I'll see everyone in 15 minutes.</p>

<p style="text-align: right;">Page 4887</p> <p>1 (A recess is taken.)</p> <p>2 (The jury enters the courtroom. The</p> <p>3 following takes place in the presence of the jury.)</p> <p>4 MR. CEDILLO: May I proceed, your Honor?</p> <p>5 THE COURT: Yes, Mr. Cedillo.</p> <p>6 MR. CEDILLO: Thank you.</p> <p>7 Q. Doctor, you had mentioned that the book</p> <p>8 that we brought out, the third edition, you said</p> <p>9 something about probably more lawyers have been</p> <p>10 buying it than doctors?</p> <p>11 A. Yes.</p> <p>12 Q. And you mentioned that the last chapter,</p> <p>13 one is written from a plaintiff's lawyer perspective</p> <p>14 and one chapter is written by a defendant lawyer</p> <p>15 perspective. Is that correct?</p> <p>16 A. Yes, sir.</p> <p>17 Q. I gather, then, we can safely conclude</p> <p>18 that you, Doctor, have been involved in</p> <p>19 asbestos-related litigation as part of your work</p> <p>20 these four decades?</p> <p>21 A. I have.</p> <p>22 Q. Okay, sir.</p> <p>23 Now, when did you begin your involvement</p> <p>24 in asbestos-related litigation, Doctor?</p> <p>25 A. I'd say probably the first case that I</p>	<p style="text-align: right;">Page 4889</p> <p>1 A. Plaintiff.</p> <p>2 Q. Have you ever testified for the defense</p> <p>3 of the Kent original filter before this case?</p> <p>4 A. No -- well, in terms of in a court?</p> <p>5 Q. Yes.</p> <p>6 A. If you consider depositions testimony,</p> <p>7 I've given depositions.</p> <p>8 Q. But in court. Now, have you testified</p> <p>9 for Lorillard Tobacco Company Kent, or were you</p> <p>10 testifying for Hollingsworth & Vose?</p> <p>11 A. The latter.</p> <p>12 Q. The latter. So for Kent cigarettes, for</p> <p>13 Lorillard Tobacco, have you been a person who has</p> <p>14 testified on behalf of the original Kent cigarette?</p> <p>15 A. I don't think so.</p> <p>16 Q. But you have testified against the</p> <p>17 original Kent cigarette. Correct?</p> <p>18 A. Yes, sir.</p> <p>19 Q. Okay. And we're going to explore that,</p> <p>20 sir. Let's do that now.</p> <p>21 When you testified against the</p> <p>22 Kent -- original Kent cigarette, sir, what time frame</p> <p>23 are we talking about?</p> <p>24 A. I believe the last time I testified in a</p> <p>25 Kent case was 1997.</p>
<p style="text-align: right;">Page 4888</p> <p>1 saw that was a litigation case was 1981, though I was</p> <p>2 neither deposed in it nor did I testify in that case.</p> <p>3 Probably around '82 or '83, I had the</p> <p>4 first depositions done and testified in some work</p> <p>5 comp cases. And then in 1985 was the first jury</p> <p>6 trial that I testified in.</p> <p>7 Q. Okay. And, Doctor, since the '80s</p> <p>8 through today, have you involved yourself in</p> <p>9 litigation on both sides of the docket, the plaintiff</p> <p>10 and the defense side?</p> <p>11 A. I have.</p> <p>12 Q. And have your opinions on asbestos and</p> <p>13 asbestos-associated disease, have they changed over</p> <p>14 the years, Doctor?</p> <p>15 A. Sure. They've been refined from a</p> <p>16 number of issues as more information became</p> <p>17 available.</p> <p>18 Q. And have you testified in the past</p> <p>19 regarding Kent cigarettes with the</p> <p>20 asbestos-containing filter material, what we've</p> <p>21 called the original Kent cigarette? Have you</p> <p>22 testified in original Kent cases before, Doctor?</p> <p>23 A. I have.</p> <p>24 Q. And did you testify for the plaintiff or</p> <p>25 the defense?</p>	<p style="text-align: right;">Page 4890</p> <p>1 Q. All right, sir. And your opinions were</p> <p>2 what in the 1997 time frame when you testified</p> <p>3 against the Kent original filter?</p> <p>4 A. Using certain information and making</p> <p>5 certain assumptions, I believed that it was likely</p> <p>6 that the crocidolite from the Kent filter was a</p> <p>7 contributing factor to the patient's mesothelioma.</p> <p>8 Q. All right, sir.</p> <p>9 Let's explore. Obviously -- I say</p> <p>10 obviously because I brought you here -- have you</p> <p>11 changed your mind?</p> <p>12 A. Yes.</p> <p>13 Q. Okay. And we're going to explore why</p> <p>14 you changed your mind. But before we do that, I want</p> <p>15 to explore what your rationale was, what reasons did</p> <p>16 you have back in the '90s when you were testifying</p> <p>17 against the original Kent cigarette. Let's talk</p> <p>18 about that first. Okay?</p> <p>19 A. Sure.</p> <p>20 Q. What were some of those reasons for the</p> <p>21 opinions that you were giving at that time, sir,</p> <p>22 specifically?</p> <p>23 A. Well, one had to do with crocidolite</p> <p>24 being the most potent fiber type in terms of the</p> <p>25 cause of mesothelioma. And the other main reasons</p>

<p style="text-align: right;">Page 4891</p> <p>1 were that using -- making some calculations based on 2 a study that had been published, I believe in 1995, 3 by Dr. Longo, that making certain assumptions and 4 calculations, I came to the conclusion that more 5 likely than not this person would have an amount of 6 asbestos in their lungs that's above background. 7 Q. All right, sir. The jury has heard 8 about Dr. Longo and his Cancer Research study 9 publication. 10 A. Yes. 11 Q. You're familiar with that study, are you 12 not? 13 A. I am. 14 Q. And you're familiar with the syringe 15 experiment that was the basis for those calculations 16 and that study. Correct? 17 A. Yes. 18 Q. Now, what was it about the syringe 19 experiment that you took to support your conclusion 20 in the '90s that Kent, original Kent, could 21 contribute to cause mesothelioma? 22 A. Well, I assumed that from the experiment 23 was a reasonable approximation of what an individual 24 would get from smoking the cigarette. 25 I then made the assumption about fibers</p>	<p style="text-align: right;">Page 4893</p> <p>1 an elevated content of asbestos. 2 Q. Doctor, do you recall how Dr. Longo 3 treated bundles of fibers in his study? 4 A. He counted them as a single structure, 5 yes, sir. 6 Q. Okay. And did that inform the opinion 7 you held in the '90s regarding original Kent as a 8 causal relationship to mesothelioma? 9 A. Yes. 10 Q. How? 11 A. I considered that the bundles of fibers 12 then might break up into additional fibers once they 13 were deposited in the lung tissue, and that that 14 would result in an even higher burden than -- than 15 was determined from just counting the structures. 16 Q. Doctor, did any animal studies factor in 17 to assist your conclusions back in the '90s that Kent 18 could be a contributing factor in mesothelioma? 19 A. Yes. 20 Q. And in which way, and describe that for 21 us, please. 22 A. Yeah, that's talked about in Chapter 10 23 of my text in experimental animal studies, that 24 studies had suggested that somewhere between 25 65 percent and 100 percent of commercial amphibole</p>
<p style="text-align: right;">Page 4892</p> <p>1 that would be deposited in the lung, including the 2 clusters of fibers, that clusters could then break up 3 into larger numbers of fibers. 4 Then I made some assumptions about the 5 percentage of the asbestos that would actually be 6 deposited in the lungs, and then about how long it 7 would take to clear those fibers from the lungs. 8 Q. And all of those assumptions and 9 conclusions and calculations that you've generally 10 described, sir, they were all driven by the Longo 11 study? 12 MR. MAIMON: Objection, leading. Sorry. 13 THE COURT: Objection sustained. 14 Q. Okay. Tell us the basis that you were 15 using for these calculations that led to your support 16 of the theory that Kent was a contributing factor in 17 causing mesothelioma. 18 A. Yeah. I took the numbers from Dr. Longo 19 about the release of fibers, the numbers of fibers 20 that were being released, and then did the 21 calculations about how much would then be deposited 22 based on somebody smoking a pack a day, say, for four 23 years from 1952 to 1956, and about how long it would 24 take to clear those fibers out of the lungs, and 25 concluded that more likely than not, you would have</p>	<p style="text-align: right;">Page 4894</p> <p>1 fibers, of which crocidolite is one, would be 2 deposited. That which was breathed in, almost all of 3 it was deposited in the lungs of the rats. And so I 4 was using that as part of my calculations. 5 Q. All right, sir. And was there a 6 particular study involving mesothelioma in women that 7 informed your opinion in the '90s that Kent was a 8 contributing factor to mesothelioma, the original 9 Kent cigarette? 10 A. Yeah. We had done a study of malignant 11 mesothelioma in women published in 1997, so we 12 completed it by 1996. And that study -- in that 13 study we had among our 60-something cases -- I think 14 it was 62 cases we had of mesothelioma in women, 15 three of them had a history of smoking Kent 16 cigarettes. So we thought, well, that's high 17 compared to what the market share of Kent was. So 18 that disproportionate number suggested there might be 19 an association. And actually, I believe, as I 20 recall, in the chapter we said that this -- that this 21 needs to be further investigated in an 22 epidemiological study. 23 Q. All right, sir. So have we discussed 24 the factors that were in play when you were of the 25 opinion in the '90s that the original Kent filter</p>

<p style="text-align: right;">Page 4895</p> <p>1 could be a contributing cause to someone's 2 mesothelioma? 3 A. Yes. 4 Q. All right, sir. 5 Now, did that opinion change, Doctor? 6 A. Yes. 7 Q. And when did it change? 8 A. Well, I wouldn't say it was overnight. 9 I think there were several things that influenced it. 10 First of all, prior to my testifying in 11 that case in 1997, we had done fiber analysis on one 12 case and found -- in which their only known exposure 13 was smoking Kent cigarettes, and we found no 14 crocidolite present in the lungs. 15 Q. Okay. Let's stop right there. 16 Is that case one that was -- that 17 appeared in the published literature? 18 A. Eventually, yes. 19 Q. Eventually it did? 20 A. Yes. 21 Q. And the jury may have seen that. That's 22 why I interrupted you. But let's break that down a 23 little bit. 24 Did you perform a fiber burden analysis 25 on the lung tissue of the woman who was the subject</p>	<p style="text-align: right;">Page 4897</p> <p>1 lung. For some lung cancers and some mesothelioma, 2 they'll take out the whole lung as part of the 3 treatment. And then we have the lung tissue which we 4 can study in that circumstance. 5 And then the other way is if a patient 6 dies and an autopsy is done, then we can take the 7 tissue from the autopsy and perform the procedure 8 looking for the asbestos. 9 Q. And who determines whether somebody 10 after death is going to have a section of the lung 11 tissue taken so that a fiber burden analysis can be 12 conducted? 13 MR. MAIMON: Objection. 14 THE COURT: Sustained. Rephrase. 15 Q. Well, you're familiar with the medical 16 records of Mr. Argento, are you not? 17 A. I am. 18 Q. Was a fiber burden analysis conducted on 19 the lung tissue of Mr. Argento? 20 A. No. 21 Q. Could it have been done? 22 A. Sure. 23 Q. Are you aware of why it wasn't? 24 MR. MAIMON: Objection. 25 A. No.</p>
<p style="text-align: right;">Page 4896</p> <p>1 of that case where it was claimed that her only known 2 exposure to asbestos was to a Kent cigarette 3 between '52 and '56? 4 A. I did in one case, but that was not the 5 case that I was testifying in. The case I was 6 testifying in did not have a fiber analysis done. 7 Q. Yes, sir. That was my fault. The 8 question I asked was incorrect. 9 Did you do a fiber burden analysis on a 10 woman who claimed that her only known asbestos 11 exposure was to a Kent cigarette? 12 A. Yes, sir. 13 Q. And, again, tell us what the fiber 14 burden process -- what is it that you physically are 15 doing when you perform a fiber burden? 16 A. Yes, it's dissolving the lung tissue 17 away, and then looking with the light microscope and 18 the electron microscope to determine the amount and 19 type of any asbestos present. 20 Q. Okay. So how do you get the lung tissue 21 to -- to work it to end up putting the particles 22 under a microscope? How do you get it? 23 A. Well, there's several ways. One is if 24 the patient has a surgical procedure where they 25 remove part of the lung, or in some cases the whole</p>	<p style="text-align: right;">Page 4898</p> <p>1 THE COURT: Overruled. 2 MR. CEDILLO: When he says objection, 3 don't answer. 4 THE COURT: I understood the delay over 5 here. The objection is overruled and he answered. 6 Q. He did. Either way. All right. 7 So the tissue is sent to your 8 laboratory, and then you conduct a fiber burden 9 analysis. Correct? 10 A. Correct. 11 Q. And you did that for a woman who claimed 12 that -- or it was claimed that her only known 13 exposure was to Kent cigarettes. Correct? 14 A. Yes. 15 Q. Now, you're familiar with the specific 16 type of asbestos that was the filtering agent in the 17 filter from '52 to '56. Correct? 18 A. Yes. 19 Q. And what was that, sir? 20 A. Crocidolite. 21 Q. Okay. And when you did the fiber burden 22 analysis, you broke down the tissue and you put 23 the -- the mineral particles under your microscope, 24 what kind of asbestos did you find, if any? 25 A. Amosite.</p>

<p style="text-align: right;">Page 4899</p> <p>1 Q. Did you find any crocidolite, 2 whatsoever? 3 A. No. 4 Q. Okay. Did this experiment have any 5 impact on the opinion that you formed about whether 6 or not Kent really could be a contributing factor in 7 causing mesothelioma? 8 A. To a degree. It did not contribute to 9 the cases in which the only known exposure was to 10 Kent because that woman had another known exposure 11 that accounted for the amosite. 12 Q. All right, sir. 13 Now, so you conducted that particular 14 fiber burden. Have you had occasion to conduct other 15 fiber burdens on persons who claimed that a Kent 16 cigarette was their source of asbestos exposure? 17 A. Yes. 18 Q. How many times, sir? 19 A. Since that case I testified in in 1997, 20 I mentioned I had already done one. I have done 21 three additional cases. 22 Q. All right. And what were your results 23 in the three additional cases of fiber burden 24 analysis on people who claimed that their exposure to 25 asbestos came through an original Kent filter?</p>	<p style="text-align: right;">Page 4901</p> <p>1 A. The first one was mid-1990s, and I think 2 the last one was done by the early 2000s. 3 Q. Okay. Did anybody at Lorillard Tobacco 4 Company know that you were doing these fiber burden 5 analyses? Did they have any input with you, or 6 direction, or were you reporting to anyone at 7 Lorillard when you were doing these fiber burden 8 analyses? 9 MR. MAIMON: Objection. 10 THE COURT: Overruled. 11 A. Not Lorillard, no. 12 Q. Okay. Now, when you did these fiber 13 burden analyses, what kind of equipment did you use, 14 your microscopes, and so forth? Is it possible that 15 you weren't using the right equipment to be able to 16 detect what was there? 17 A. I don't think so. The microscope that I 18 use today was -- was purchased by the Durham VA 19 Medical Center in 1992. So I've been using that for 20 the last 24 years. That microscope was moved over to 21 Duke when I retired from the VA and became full-time 22 at Duke in March of 2007. And we had published 23 studies about our findings of -- of crocidolite 24 asbestos, and we found a number of cases with 25 crocidolite in their lung tissues in elevated amounts</p>
<p style="text-align: right;">Page 4900</p> <p>1 A. In all four cases in which the only 2 known or claimed exposure was through Kent 3 cigarettes, we did not find any crocidolite in the 4 tissues. 5 Q. And what did -- did that inform your 6 opinion to the point where you started rethinking 7 your conclusions from the 1990s? 8 A. Yes. 9 Q. How, sir? 10 A. Well, I mean, as a pathologist, as 11 somebody who studied asbestos-related diseases for a 12 lifetime, then I believed, and continue to believe, 13 that what you find in the lung is most informative 14 about the causation of disease. And so -- and our 15 criteria for causation means if you find an amount of 16 asbestos in a lung tissue that's different, elevated 17 above what you expect to find in my lung or your 18 lung, then we consider that to be causative of -- of 19 asbestos-related mesothelioma. 20 If we don't, then I don't believe you can 21 say that asbestos was a contributing factor in those 22 cases. 23 Q. Now, Doctor, when you are performing 24 these fiber burdens, what period of time did that 25 span, these fiber burdens on the four Kent smokers?</p>	<p style="text-align: right;">Page 4902</p> <p>1 in that period since 1992. 2 Q. And I mean, as far as the equipment that 3 you're using, sir, is it outdated? I mean, do you 4 still have a carburetor on it where there's others 5 that have fuel injection to them? Or I mean, is 6 there any criticism that maybe you just don't have 7 the right equipment to be able to pick up what's 8 there? 9 A. No. I mean, the size of fibers that we 10 are interested in has not changed since I started 11 doing this with the electron microscope out at 12 Research Triangle Park in 1981. And we switched over 13 to a different microscope, also the same type, 14 scanning electron microscope, as I mentioned, in 15 1992. And I still use the same procedures during 16 that time. The microscope annually undergoes 17 maintenance procedures, routine maintenance, where 18 they come in and make sure it's operating like a new 19 one. And so I don't think that's an issue. 20 Q. All right, sir. 21 Now, these Kent smoker fiber burden 22 analyses that you've just described, did you publish 23 in the medical or scientific literature on -- on 24 these studies that you conducted, sir? 25 A. Yes.</p>

<p style="text-align: right;">Page 4903</p> <p>1 Q. And where would we find that in the 2 literature? 3 A. Well, we published it twice, actually. 4 The first time was -- it was sort of an afterthought, 5 a mention in the 2002 study we did of the 6 1,445 cases. We mentioned in there that we had 7 analyzed four cases whose only known exposure was to 8 Kent cigarettes, and had not found any crocidolite in 9 the lungs. That was like a paragraph in the 10 discussion. 11 Then in 2009, we actually wrote a paper 12 on crocidolite and mesothelioma. And we -- we 13 reported our -- our results and observations that 14 we'd made about crocidolite and mesothelioma, and 15 again repeated that we analyzed four cases whose only 16 known exposure was through Kent cigarettes and did 17 not find increased crocidolite in any of those cases. 18 Q. All right. So to summarize this 19 section, sir. Did your fiber burden analyses on 20 smokers who claim their asbestos exposure through the 21 original Kent cigarette, how did that impact your 22 current opinion on whether or not the original Kent 23 cigarette could contribute to cause mesothelioma? 24 A. Well, as I mentioned, the last time I 25 testified for a plaintiff in a Kent case, I had done</p>	<p style="text-align: right;">Page 4905</p> <p>1 Honor. 2 THE COURT: So far you've stuck to the 3 published study. 4 MR. MAIMON: The way the question is 5 phrased is my concern. 6 MR. CEDILLO: I will represent to you 7 that I have instructed him on the Court's rulings, 8 and that doesn't mean I'm not going to try again and 9 maybe have a proffer or whatever, but I can ask a 10 more specific question that will make sure that he 11 doesn't volunteer anything. 12 MR. MAIMON: Sure. 13 THE COURT: Okay. 14 MR. CEDILLO: Because I'm aware of the 15 Court's ruling, and I wasn't trying to back-door it. 16 MR. MAIMON: I didn't think Mr. Cedillo 17 was trying to back-door it. I was just concerned 18 that the witness, in responding to such an open-ended 19 question, would volunteer those things. 20 MR. DEFEO: Maybe there's two front 21 doors. 22 MR. CEDILLO: I'll tie it down, your 23 Honor. 24 THE COURT: Okay. 25 (End of sidebar.)</p>
<p style="text-align: right;">Page 4904</p> <p>1 one analysis on a patient whose only known exposure 2 was to Kent. And the subsequent three cases where we 3 still did not find any crocidolite cast a 4 considerable doubt on whether or not smoking Kent 5 could result in enough exposure to cause an 6 individual to get mesothelioma. 7 So that was -- that was -- that was an 8 important consideration in my change of opinion. 9 Q. All right, sir. 10 Now, let's talk about Dr. Longo. What 11 was it about your further review of Dr. Longo that 12 caused a change in the opinion from the one you held 13 in the 1990s? 14 MR. MAIMON: Objection. 15 THE COURT: Sidebar. 16 (At sidebar.) 17 MR. MAIMON: I'm going to object, your 18 Honor, to the extent this is an invitation to the 19 witness to talk about the unpublished studies which 20 has been -- that's the subject of the Court's 21 rulings. I have reviewed some of the witness' prior 22 testimony about this, and he has certain criticisms 23 and comments about what's been found in unpublished 24 data. 25 MR. CEDILLO: I see the concern, your</p>	<p style="text-align: right;">Page 4906</p> <p>1 MR. CEDILLO: May I proceed, your Honor? 2 THE COURT: Certainly. 3 Q. Dr. Roggli, I want to break up my 4 questions to you on Dr. Longo into the methodology 5 employed, and then the calculations that he employed 6 and your reassessment of those calculations that 7 you've already testified about very generally. Okay? 8 A. Yes, sir. 9 Q. So let's start with the methodology. 10 Did you form a subsequent opinion regarding 11 Dr. Longo's methodology in the study that you 12 conducted? And I want you to be within four corners 13 of the study that came out in Cancer Research. Okay? 14 A. Yes, sir. 15 Q. All right, sir. Did you reassess his 16 methodology? 17 A. Yes. 18 Q. And what -- what did that entail, sir? 19 A. Well, initially, it was after the last 20 trial that I testified in for a plaintiff in Kent 21 cigarettes. The cross-examination made me realize 22 that my assumption that using the syringe test on 23 40-year-old Kent cigarettes, that that was similar to 24 smoking cigarettes, is probably not a good one. And 25 I had not really, I guess, known that, or thought</p>

<p style="text-align: right;">Page 4907</p> <p>1 that through enough at the time of that trial in 2 1997. I mean, there was subsequent information that 3 I got probably around 2001 that led me to realize 4 there were other problems in Dr. Longo's analysis 5 that -- 6 Q. Well, Doctor, let me ask you to stick 7 with the syringe analysis and the methodology -- I'll 8 call that the methodology. 9 A. Yeah. 10 Q. Let's stay with that and go just real 11 tight on Q and A in this area. Okay? 12 A. Sure. 13 Q. What was it that you gained an awareness 14 that had to do with the syringe and -- and the method 15 that he used in conducting the study that led to the 16 publication of the Cancer Research article? 17 A. Well, just the questions that I was 18 asked on cross-examination made me realize that the 19 method that was similar to smoking was not a good 20 one. That left me with considerable doubts about 21 using the syringe method. 22 And then some other things he did with 23 the methodology was the indirect method of analyzing 24 a filter, which I didn't know at the time of that 25 case, but I did subsequently learn, I think around</p>	<p style="text-align: right;">Page 4909</p> <p>1 It probably was not a realistic comparison. 2 Q. And why would that be, sir? 3 MR. MAIMON: Objection. 4 THE COURT: Overruled. 5 A. I think it has to do with the physics of 6 pulling the syringe down to draw air through it is 7 not the same as -- as the individual puffing a 8 cigarette. The way that you had to -- my 9 understanding from his methodology, to -- to push the 10 filter down so that it would fit into the syringe had 11 the potential for damaging the filter and releasing 12 things that otherwise would not have been released. 13 And also the fact that the cigarettes were not off 14 the shelf as they were smoked, but they were 40 years 15 old. 16 Q. In 1995 they were 40 years old. 17 A. Correct. 18 Q. All right, sir. 19 Now, the second category I heard was the 20 methodology he used to do the counting. 21 A. Yes. 22 Q. You talked about it as a direct 23 method -- indirect method. 24 A. Yes. 25 Q. And I assume there's a direct method.</p>
<p style="text-align: right;">Page 4908</p> <p>1 2001, from Berman and Crump's study for the 2 Environmental Protection Agency, that that procedure 3 has the ability to increase the fibers that you're 4 detecting by one or two orders of magnitude. That's 5 a factor of 10 to 100. 6 Q. All right. 7 A. And then the other thing that I came to 8 subsequently realize is that his counting of the 9 clusters that were part of his methodology, instead 10 of that resulting in even more fibers in the lung, 11 probably would result in less in the lung because it 12 was the realization from -- again from the Berman and 13 Crump analysis, that these clusters have a diameter 14 so large that they're not going to be deposited in 15 the lower respiratory tract if they get there. 16 Q. Let's break that down then. I heard 17 three general categories in the reanalysis that you 18 did on the methodology. 19 The first one has to do with the 20 assumption that the syringe experiment simulated the 21 smoking -- the act of smoking a cigarette. Correct? 22 A. Yes. 23 Q. And what conclusions did you reach upon 24 further study about that assumption? 25 A. It probably was not a good assumption.</p>	<p style="text-align: right;">Page 4910</p> <p>1 Tell us a little bit about that. What's the 2 difference? 3 A. Well, this is the methodology that the 4 EPA has established for looking at water samples or 5 air samples to see about the amount of asbestos. And 6 a direct method is one where you had the air go 7 through the filter, or the water go through the 8 filter, and then you take that filter and you look at 9 it directly under an electron microscope and count 10 the fibers. 11 The indirect method is you use the 12 filter the same way, but now you take that filter, 13 you dissolve it in material. You resuspend the 14 particles that were on the filter, and put that on a 15 new filter, and then look at that under an electron 16 microscope. And it sounds like, well, what's the 17 difference. But the EPA determined, oh, that can 18 increase the number of fibers that you see because 19 the process of extracting them from -- from the 20 original filter can break them up into smaller fibers 21 and into more fibers so that you've greatly increased 22 the numbers. It can cause clusters to break up, for 23 example. So that was -- that was a problem that I 24 learned about subsequently. 25 Q. All right, sir.</p>

<p style="text-align: right;">Page 4911</p> <p>1 So we've talked about the method of</p> <p>2 counting using the indirect method led you to</p> <p>3 reassess the earlier opinion that you had then.</p> <p>4 A. Yes, sir.</p> <p>5 Q. All right, sir. And then I think the</p> <p>6 third one that I've heard had to do with how he</p> <p>7 treated the presence of bundles. What were you doing</p> <p>8 with the bundle part of his testing when, in the</p> <p>9 '90s, you were testifying that Kent could lead to</p> <p>10 cause mesothelioma?</p> <p>11 A. Well, I was assuming that those would be</p> <p>12 deposited in the lung, and then -- in the lung and</p> <p>13 the lung environment where the fluids that were</p> <p>14 present there could then break up into smaller</p> <p>15 fibers, and those could be distributed in the lung</p> <p>16 and actually increase the exposure.</p> <p>17 Q. All right. That's what you thought in</p> <p>18 the '90s?</p> <p>19 A. Yes.</p> <p>20 Q. And then what happened to make you</p> <p>21 think -- or rethink that position?</p> <p>22 A. Well, then I was reading the Berman and</p> <p>23 Crump's analysis and realized -- it was almost a</p> <p>24 "duh" moment. Why hadn't I thought of that before?</p> <p>25 Those structures would be too large to even be</p>	<p style="text-align: right;">Page 4913</p> <p>1 defendants, for Lorillard, or for anybody?</p> <p>2 A. No, I think they were independent.</p> <p>3 Q. And was that in the medical and</p> <p>4 scientific literature?</p> <p>5 A. Eventually they published their findings</p> <p>6 in 2008 in the scientific literature.</p> <p>7 Q. And you took the work that they were</p> <p>8 doing there, and how did that inform your new opinion</p> <p>9 then, sir?</p> <p>10 A. Well, one was that -- that the use of</p> <p>11 the indirect methodology will increase the fiber</p> <p>12 count. And the other that those clusters that had</p> <p>13 been counted probably never would get into the lung</p> <p>14 in the first place.</p> <p>15 Q. Why would they not get into the lung in</p> <p>16 the first place, sir, the clusters?</p> <p>17 A. Well, there is a size of particles in</p> <p>18 general that can be deposited in the lower</p> <p>19 respiratory tract. That is, the lung where your gas</p> <p>20 exchange takes place, where the alveoli are. And</p> <p>21 that's usually -- 5 microns is the -- is the typical</p> <p>22 size. That, and fibers and structures below that.</p> <p>23 For mineral fibers, they tend to line up</p> <p>24 along the direction of air flow, so their diameter is</p> <p>25 the most important factor. And so an individual</p>
<p style="text-align: right;">Page 4912</p> <p>1 deposited in the lower respiratory tract.</p> <p>2 Q. I'm sorry. I didn't hear the</p> <p>3 pronunciation. It's my ears, it's not your</p> <p>4 pronunciation. You're referring to a published</p> <p>5 article by two authors?</p> <p>6 A. Yes.</p> <p>7 Q. What --</p> <p>8 A. No, that was -- they subsequently</p> <p>9 published their work in 2008.</p> <p>10 Q. I see.</p> <p>11 A. But what they did around 2001 is that</p> <p>12 they put together an analysis for the Environmental</p> <p>13 Protection Agency, and that became available to</p> <p>14 anybody that wanted to look at it.</p> <p>15 Q. And what was the name of that analysis,</p> <p>16 sir?</p> <p>17 A. I don't recall the title of it, but it</p> <p>18 was looking at fiber indices, is what they eventually</p> <p>19 published about.</p> <p>20 Q. And who were the authors again, please?</p> <p>21 A. Wayne Berman and Crump, Kenny Crump.</p> <p>22 Q. Berman and Crump?</p> <p>23 A. Yes.</p> <p>24 Q. And to your knowledge, did Berman and</p> <p>25 Crump, were they doing this for a group of</p>	<p style="text-align: right;">Page 4914</p> <p>1 fiber can be 20, 30, even 100 microns long. If it's</p> <p>2 thin enough, it lines up like a straw in the air and</p> <p>3 just goes right down deep into the lung. If you've</p> <p>4 got a cluster of them like a ball, and it's more than</p> <p>5 5 microns across, then it's either going to be</p> <p>6 deposited in the nose, in the hairs in the nose in</p> <p>7 the upper respiratory tract, or it will impact high</p> <p>8 up in the airways, the windpipe and the bronchi.</p> <p>9 Q. All right, sir.</p> <p>10 And this -- this work by these two</p> <p>11 individuals assisted you in reassessing your opinion</p> <p>12 about the Kent filter that you had in the mid-'90s?</p> <p>13 A. Yes.</p> <p>14 Q. All right, sir.</p> <p>15 Now, we've been talking about</p> <p>16 Dr. Longo's testing and his methodology. Did you</p> <p>17 come to any new awareness or conclusions regarding</p> <p>18 the calculations?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. Let's talk about that.</p> <p>21 What was it about his calculations that</p> <p>22 you began to question?</p> <p>23 A. It's actually the calculations that I</p> <p>24 did based on what his fiber counts were. And two</p> <p>25 things that had changed is my assumption about the</p>

<p style="text-align: right;">Page 4915</p> <p>1 amount that's deposited in the lower respiratory 2 tract in humans and the clearance of the fibers from 3 the lungs. And the first one in that regard, the 4 deposition, I assumed that the studies in the rats 5 that 65 to 100 percent of the respirable fraction of 6 the fibers get deposited in the lower respiratory 7 tract.</p> <p>8 But Berman and Crump said, ah, not so 9 with humans. It's about 20 percent, or one-fifth as 10 much of what the rats get. I don't know why. 11 Physiologically there's a difference.</p> <p>12 So that assumption that essentially 13 100 percent of the fibers get deposited in the lower 14 respiratory tract was wrong.</p> <p>15 Secondly, Berman and Crump pointed out 16 two components of clearance. There's a rapid 17 component that gets rid of a certain percentage of 18 fibers, and then a much slower component. And so I 19 was taking into account the slower component of 20 clearance, which is 10 to 20 years, which means, 21 let's say you breathed in a thousand fibers, then 10 22 to 20 years later, if that's your half-life, you 23 would have half as many, you would have 500 fibers 24 still in the lung. So that's what I was assuming. 25 But that was incorrect because there's a rapid</p>	<p style="text-align: right;">Page 4917</p> <p>1 calculations that changed, which the witness has 2 already clarified it. So the question as phrased is 3 improper.</p> <p>4 MR. CEDILLO: I'll -- I can always reask 5 and be clear, your Honor.</p> <p>6 THE COURT: Just to be clear, this 7 witness did testify with regard to calculations, his 8 calculations.</p> <p>9 MR. CEDILLO: Right. But I want to be 10 clear, your Honor. Longo had calculations, and then 11 he put them to the test with new knowledge and 12 reached the conclusion that his calculations 13 overestimated deposition rate and underestimated 14 clearance. That's what he's already said.</p> <p>15 MR. MAIMON: No, that's not what he 16 said. Longo had data, had numbers, and then he made 17 calculations which he says both overestimated 18 deposition rates and underestimated clearance. It 19 wasn't Longo's calculations.</p> <p>20 THE COURT: That's how I understood his 21 response.</p> <p>22 MR. CEDILLO: I'll rephrase.</p> <p>23 THE COURT: Yes.</p> <p>24 (End of sidebar.)</p> <p>25 THE COURT: Please rephrase.</p>
<p style="text-align: right;">Page 4916</p> <p>1 component which gets rid of a fraction of the fibers 2 before you get to that long, slow clearance 3 component.</p> <p>4 Q. All right. If I -- I'm going to attempt 5 to summarize what you're talking about in terms of 6 calculations. And the way that I can process it is 7 that there was an overestimation of what ends up in 8 your lung in terms of fiber count, and -- and an 9 underestimation, or undercounting of what gets 10 cleared. Have I got that more or less accurate 11 there?</p> <p>12 A. Yes.</p> <p>13 Q. Okay. So in the under -- in the 14 overestimation, you did further research and reached 15 the conclusion that Dr. Longo's numbers were doing 16 what in terms of its calculation?</p> <p>17 MR. MAIMON: Objection.</p> <p>18 THE COURT: Sidebar.</p> <p>19 (At sidebar.)</p> <p>20 MR. MAIMON: My objection, your Honor, 21 is the witness has already clarified that it wasn't 22 Dr. Longo's calculation. It was his calculations 23 based on Dr. Longo's numbers. And, therefore, the 24 question keeps perpetuating a miscomprehension or 25 misleading of the jury that it's somehow Dr. Longo's</p>	<p style="text-align: right;">Page 4918</p> <p>1 Q. Dr. Roggli, in the Cancer Research 2 article, Dr. Longo presented certain calculations 3 regarding the release of the fibers based on the 4 methodology he employed to test those 40-year-old 5 cigarettes. Correct?</p> <p>6 A. Yes.</p> <p>7 Q. All right, sir. What did you do to 8 determine any change of your opinion based on 9 Dr. Longo's calculation?</p> <p>10 A. Well, I think there's several things 11 that I think about that.</p> <p>12 First, as I mentioned, after that last 13 trial I testified in, my assumption that this was 14 representative of the way to smoke cigarettes was 15 probably not a good one.</p> <p>16 Secondly, even if you did assume that 17 this is similar to the smoking, then it's going to 18 reduce significantly the amount of fibers that are 19 going to end up in the lung by -- by, number one, 20 considering the methodology being the indirect method 21 technique; number two, counting the clusters in; and 22 number three, my overestimation of deposition; and 23 five -- and four, my underestimation of clearance.</p> <p>24 So those are all directions of reducing 25 the amount that was in the lungs. And so my</p>

<p style="text-align: right;">Page 4919</p> <p>1 conclusion was, once I had done the new calculations, 2 that this is not going to be a significant level. 3 Q. All right. And when you say your 4 overestimation of deposition, you're not talking 5 about questions and answers that are asked of a 6 witness outside the courtroom and we show a video. 7 What do you mean by "deposition"? 8 A. Oh, yes, I'm sorry. Yes. It just means 9 deposited in the lung tissues. 10 Q. We've got some budding law students 11 after all these weeks in trial. I want to make sure 12 we're on the same track. 13 A. Yes, sir. 14 Q. All right. And the conclusions you 15 reached back in the '90s using the methodology and 16 the conclusions of Dr. Longo, when you put the new 17 data to perform calculations, taking into account 18 these things you've talked about, what was your 19 result? 20 A. It was below what we considered to be an 21 elevated amount of crocidolite in the lung tissue 22 concentrations. And -- and, of course, it was my 23 opinion that what calculations I did from Dr. Longo 24 weren't really relevant because we weren't finding 25 elevated crocidolite when we actually looked in the</p>	<p style="text-align: right;">Page 4921</p> <p>1 half-lives later. If you considered 20 years, that 2 would be two half-lives later. 3 Q. And assuming a latency period of 4 mesothelioma of 30 to 40 years, is that a reasonable 5 assumption, sir? 6 A. Yes. 7 Q. And if -- if the half-life is clearing 8 every ten years or so, what is the effect of a fiber 9 that ends up being cleared in relation to causation 10 of disease, Doctor? 11 A. Well, most of the clearance 12 takes -- well, clearance goes into several different 13 compartments. One of the compartments that it goes 14 to, it is removed from the lungs, it goes to the 15 lymphatics and goes to the lymph nodes. 16 Another place that it goes to would be 17 the pleura. And another place it goes to would be 18 removed from the lungs entirely, and that's probably 19 where the fast clearance component is involved where 20 the fibers that were breathed in land on the surface 21 of the airways that are covered with this mucus 22 blanket. And what we have in the lining of the 23 airways are cells that have hairs on the surface 24 called cilia, which beat rhythmically in a direction 25 which is removing the mucus upwards and outwards from</p>
<p style="text-align: right;">Page 4920</p> <p>1 lung tissues. 2 Q. All right. And that's covered in the 3 first reason we talked about? 4 A. Yeah. 5 Q. All right. Now, that's on the 6 calculation that resulted in the overestimation. 7 Let's talk about the underestimation of 8 the clearance amount, and what you're talking about, 9 half-life and all that. Let's break that down -- 10 A. Sure. 11 Q. -- in layman's terms so that I can get 12 it. Okay? 13 What was involved in this calculation 14 you performed to conclude that there is an 15 undercounting or an underestimation of what gets 16 cleared by the human body? 17 A. Yeah, I believe that that was assuming 18 that the half-life of clearance would be 10 to 19 20 years. And so that if I made a calculation about 20 this is the amount of asbestos that would have been 21 deposited, and the person last smoked Kent cigarettes 22 in 1956, and we're looking at him in 1996, 40 years 23 later, how much crocidolite would you expect to find 24 in the lungs. And that would be -- if you consider 25 the half-life to be ten years, that would be four</p>	<p style="text-align: right;">Page 4922</p> <p>1 the lung. So that fast clearance compartment relates 2 to the fraction of the fibers that land on the mucus 3 blanket and then get removed from the lungs by that 4 normal clearance mechanism. 5 Q. And in your under -- in your conclusion 6 regarding underestimation, you had focused previously 7 on the ten-year half-life going forward and not 8 adequately addressed the rapid clearance process? 9 A. Yes, sir. 10 Q. What led you to consider the rapid 11 removal process before you reached the conclusion of 12 just what the deposit may have been? 13 A. I think I realized that that was an 14 error, again, in reading the Berman and Crump 15 analysis in 2001 they talked about reminded me of the 16 two compartments of clearance. 17 Q. And, Dr. Roggli, if a fiber gets removed 18 either through the rapid clearance or the half-life 19 clearance, does that fiber contribute to cause 20 disease? 21 A. No. 22 Q. And so that is another reason why 23 you -- you changed your position on whether or not 24 Kent, an original Kent filtered cigarette could 25 contribute to causing mesothelioma, Doctor?</p>

<p style="text-align: right;">Page 4923</p> <p>1 A. Yes.</p> <p>2 Q. All right, sir.</p> <p>3 And then on the issue regarding bundles.</p> <p>4 I think you told us that back in the '90s you thought</p> <p>5 that a bundle would get into the lung tissue, and</p> <p>6 then once there, it would break up so that what was a</p> <p>7 bundle is now a whole bunch of individual fibers. At</p> <p>8 least that's the way I heard it. Am I anywhere near</p> <p>9 the ballpark?</p> <p>10 A. Yes, sir.</p> <p>11 Q. Okay. And what was it that made</p> <p>12 you -- did you change your opinion about that?</p> <p>13 A. That, again, was in the Berman and Crump</p> <p>14 analysis in 2001 that many clusters would have</p> <p>15 diameters too large.</p> <p>16 Q. Was that sort of the aerodynamics of the</p> <p>17 fiber?</p> <p>18 A. Yeah. The cluster has different</p> <p>19 aerodynamic features than a fiber. And one of the</p> <p>20 things I talk about is that the -- an individual</p> <p>21 fiber tends to line up with the direction of air</p> <p>22 flow. And so just like an arrow, we can penetrate</p> <p>23 deep into the lungs. But a cluster is more irregular</p> <p>24 so it's going to bounce around and move around and</p> <p>25 not behave the same way a fiber would</p>	<p style="text-align: right;">Page 4925</p> <p>1 observations changes, then -- then your opinions</p> <p>2 about a certain theory has to change. And that's the</p> <p>3 very nature of science. We test hypotheses, and if</p> <p>4 we find out that the science doesn't support it, then</p> <p>5 we reject it.</p> <p>6 Q. And did you follow the science, sir, in</p> <p>7 the change of your opinion regarding the original</p> <p>8 Kent filter and this research?</p> <p>9 A. I believed that I was following the</p> <p>10 science when I testified for the plaintiffs in 1997;</p> <p>11 and subsequently I realized there were a lot of</p> <p>12 assumptions that I made that I think are incorrect.</p> <p>13 And then when I added to that the findings of</p> <p>14 analysis of the lung tissue samples and not seeing</p> <p>15 crocidolite, that it probably was incorrect.</p> <p>16 Q. And, Doctor, have you published in the</p> <p>17 scientific and medical literature about your</p> <p>18 assessments regarding the Longo study that led you to</p> <p>19 change your opinion?</p> <p>20 A. Yes.</p> <p>21 Q. When did you publish that, sir?</p> <p>22 A. Yeah, I didn't go into great detail</p> <p>23 about the Longo study, but in the 2009 article on</p> <p>24 "Crocidolite and Mesothelioma," we quoted the 1995</p> <p>25 Longo study as being one that indicated that</p>
<p style="text-align: right;">Page 4924</p> <p>1 aerodynamically.</p> <p>2 Additionally, you've got tars and resins</p> <p>3 attached to the clusters, and actually to the</p> <p>4 individual fibers, that might alter their</p> <p>5 aerodynamics and keep them from penetrating deep into</p> <p>6 the lung.</p> <p>7 Just to give you an example, you can</p> <p>8 think about an arrow that has the three feathers on</p> <p>9 it and that makes it go in a straight line. If you</p> <p>10 take one of those feathers out -- I don't know if you</p> <p>11 ever did that, but I did as a kid -- take one of the</p> <p>12 feathers off the arrow and shoot it. Now it's going</p> <p>13 to go in a crazy motion because it's not</p> <p>14 aerodynamically stable. And the same thing would</p> <p>15 happen if you have a fiber that has a significant</p> <p>16 amount of tar or particulate material attached to it.</p> <p>17 It would then move erratically and would more likely</p> <p>18 impact the wall of the bronchus before it got deep</p> <p>19 into the lung.</p> <p>20 Q. And Dr. Roggli, in your field, sir, as a</p> <p>21 doctor, as a scientist, as a researcher, what does it</p> <p>22 mean to follow the science?</p> <p>23 A. Well, I think it means that if the</p> <p>24 information that's published in scientific</p> <p>25 literature, or that from your own personal scientific</p>	<p style="text-align: right;">Page 4926</p> <p>1 crocidolite could be released from smoking Kent</p> <p>2 cigarettes, and then pointed out that -- that our</p> <p>3 analysis of lung tissue samples of people whose only</p> <p>4 known exposure was to smoking -- or only known</p> <p>5 exposure was through Kent cigarettes did not support</p> <p>6 that.</p> <p>7 Q. Do you have Plaintiff's Exhibit No. 6 up</p> <p>8 there, sir?</p> <p>9 A. I don't see it. What is it?</p> <p>10 Q. It's -- I believe it's a 2008 article.</p> <p>11 A. No, I don't have it.</p> <p>12 Q. PX-006. It was only marked for</p> <p>13 identification, I believe during Dr. Moline. Let me</p> <p>14 show it to you.</p> <p>15 Is that the -- well, this is the Cancer</p> <p>16 Research article. Correct?</p> <p>17 A. Yeah, this is Dr. Longo's original 1995</p> <p>18 article.</p> <p>19 Q. All right. I thought I had the 2008</p> <p>20 article which you just referenced.</p> <p>21 MR. BERGER: It hasn't been marked yet.</p> <p>22 MR. CEDILLO: It has not been marked</p> <p>23 yet. Okay. I apologize, your Honor.</p> <p>24 (LTC-11, Marked for Identification.)</p> <p>25 Q. Let me hand you what we've marked as</p>

<p style="text-align: right;">Page 4927</p> <p>1 Lorillard Tobacco Company Exhibit 11, marked for 2 identification as 11. Can you tell us what this is, 3 sir? 4 A. Yeah, this is the article we published 5 in Ultrastructural Pathology in 2008 called 6 "Crocidolite and Mesothelioma" which I was referring 7 to. 8 Q. And you're one of the authors here, sir? 9 A. Yes, I am the senior author, the third 10 author. 11 Q. And this is where you pointed out your 12 criticism of Dr. Longo's Cancer Research study? 13 MR. MAIMON: Objection. 14 THE COURT: Overruled. 15 A. Yes. 16 Q. How does this treat -- or what reference 17 do you make regarding Dr. Longo in Lorillard 18 Exhibit 11, sir? 19 A. Well, since we were -- since we were 20 studying crocidolite and mesothelioma, and since the 21 Kent cigarette issue had come up a number of times, 22 that's one possible source of crocidolite we were 23 finding. So we addressed that and pointed out that 24 one source of possible crocidolite exposure with 25 crocidolite-containing filters of Kent Micronite</p>	<p style="text-align: right;">Page 4929</p> <p>1 MR. CEDILLO: Your Honor, he can argue 2 that and he can cross him all he wants. The paper 3 says, here's what Longo said about it, and then he 4 says, I've done all these studies and haven't found 5 anything. That's a criticism. 6 THE COURT: He's already testified to 7 it. He's read it and it is a criticism. If you 8 don't consider it a criticism, you can cross-examine 9 him. The Court considers it a criticism and finds it 10 is an appropriate question. 11 Thank you. 12 (End of sidebar.) 13 Q. And, sir, that was in 2008. Correct? 14 A. Yes. 15 Q. Did anyone at Lorillard Tobacco Company 16 know about your work in 2008 leading to what you 17 published at that time, sir? 18 MR. MAIMON: Objection. How does this 19 witness -- 20 THE COURT: Rephrase, please. 21 Q. Did Lorillard ever approach you and ask 22 you to write this, or did you ever make them aware 23 that you were doing this work that led to this 24 publication, sir? That's my question. 25 A. No, they never approached me. And if we</p>
<p style="text-align: right;">Page 4928</p> <p>1 cigarettes produced in the 1950s, and we cite the 2 Longo article. And then we pointed out, "During the 3 four years these filter cigarettes were on the 4 market, of the 15 patients with crocidolite as the 5 only commercial amphibole fiber, only three had a 6 documented history of smoking and were of sufficient 7 age for exposure during the relevant years. All the 8 others were either lifetime nonsmokers or 13 years of 9 age or younger. In the past, though, we have not 10 identified crocidolite fibers in lung tissue samples 11 from four individuals who described exposure to 12 crocidolite from Micronite filter cigarettes." 13 MR. MAIMON: Can we approach? 14 THE COURT: Yes, sidebar. 15 (At sidebar.) 16 MR. MAIMON: I'm going to ask for an 17 instruction to the jury, your Honor. Mr. Cedillo 18 asked a leading question: "This is the article where 19 you voice your criticisms of Dr. Longo." There's not 20 a single criticism of Dr. Longo, not only in the 21 section that he read, but in the entire article. And 22 yet he's representing to this jury, and Dr. Roggli 23 answered yes, not only to this cite. No. 26 is a 24 citation to -- to Longo, but there's not a single 25 criticism in here. It's improper.</p>	<p style="text-align: right;">Page 4930</p> <p>1 were working on this crocidolite/mesothelioma article 2 at a time that a case was active, I may have 3 mentioned it to them. I have no recollection. 4 Q. All right, sir. 5 Now, this has all been part of the 6 subject area of your involvement in asbestos-related 7 litigation, Doctor. That was the topic that 8 introduced all of these subtopics we've been 9 discussing. Let's wrap up that part of it by my 10 asking you whether you were compensated for the work 11 that you do in asbestos-related litigation. 12 A. Yes, sir. 13 Q. And what is your rate of compensation? 14 A. For testifying in court it's \$600 an 15 hour, with a 36-hour -- with a 24-hour cap of \$3,600. 16 Q. Okay. And so you never -- \$600 an hour, 17 and you said 3,600 cap? 18 A. For 24 hours, yes. 19 Q. So what you're doing is you're getting 20 paid \$600 for six hours, six times six is 36. 21 A. Yes, sir. 22 Q. All right. So your travel time, your 23 being here, reviewing, being in court, traveling back 24 and forth, if that takes you 24 hours portal to 25 portal, you only charge for six.</p>

<p style="text-align: right;">Page 4931</p> <p>1 A. Correct.</p> <p>2 Q. And you do that for every engagement, or</p> <p>3 is that a special rate you're giving some people?</p> <p>4 A. No, that's the same for -- for all cases</p> <p>5 that I testify in.</p> <p>6 Q. All right, sir.</p> <p>7 And I think we covered this. You</p> <p>8 testify for both plaintiffs and defendants, sir?</p> <p>9 A. Yes, sir.</p> <p>10 Q. And do you charge the same fee, the same</p> <p>11 rate whether it's for a plaintiff case or a defense</p> <p>12 case?</p> <p>13 A. That's correct.</p> <p>14 Q. All right, sir.</p> <p>15 Let's talk about a few subjects that I</p> <p>16 hope to cover quickly with you. I would like to talk</p> <p>17 to you about fiber size for a moment. Okay?</p> <p>18 A. Sure.</p> <p>19 Q. And we'll come back to Dr. Longo, but</p> <p>20 we're going to save the best for last. Okay?</p> <p>21 A. Sure.</p> <p>22 Q. On fiber size. What needs to happen for</p> <p>23 asbestos fibers to contribute to cause mesothelioma,</p> <p>24 Doctor?</p> <p>25 A. Well, the fibers have to be deposited in</p>	<p style="text-align: right;">Page 4933</p> <p>1 A. Correct.</p> <p>2 Q. And we talked about this clearance, so</p> <p>3 that if it does get in, it doesn't mean it stays in</p> <p>4 the lung, does it, sir?</p> <p>5 A. That's correct.</p> <p>6 Q. And you've talked about the certain ways</p> <p>7 that the body has to protect itself from asbestos</p> <p>8 fibers getting into the lung. What are macrophages,</p> <p>9 sir?</p> <p>10 A. Macrophage is what I call the Pac-Man</p> <p>11 cell of the lung, or the garbage collector of the</p> <p>12 lung. Its job is anything that's a foreign material</p> <p>13 that lands on the lung surface where those delicate</p> <p>14 alveoli are that are involved in gas exchange,</p> <p>15 whether it's a bacteria, a virus, a coal particle,</p> <p>16 coal dust particle, or an asbestos fiber, a</p> <p>17 macrophage's job is to react to that and try to eat</p> <p>18 it and digest it. Some things it's very good at</p> <p>19 eating and digesting, some things not so good at</p> <p>20 doing it.</p> <p>21 Q. What does it do with it after it's eaten</p> <p>22 and digested? Where does it go?</p> <p>23 A. Well, the macrophage can stay right</p> <p>24 there in the lung at that spot, and it has contained</p> <p>25 the particle. The particle is not going anywhere.</p>
<p style="text-align: right;">Page 4932</p> <p>1 the lower respiratory tract. They have to migrate to</p> <p>2 the pleura, and they have to stay there, I believe,</p> <p>3 for long periods of time.</p> <p>4 Q. And do they need to be a certain size</p> <p>5 and shape to do this migration?</p> <p>6 A. Yes.</p> <p>7 Q. Okay. And what is that generally, if</p> <p>8 you know?</p> <p>9 A. The fibers that are pathogenic, able to</p> <p>10 cause disease, are the ones that are more than</p> <p>11 5 microns, and the Berman and Crump study show it's</p> <p>12 probably ones over 10 microns in length that cause</p> <p>13 disease. So that length is an important factor in</p> <p>14 disease causation. The main important thing about</p> <p>15 diameter is that the fiber is thin enough that it can</p> <p>16 penetrate deep into the lungs. For example, you</p> <p>17 could have a fiber that's 50 microns long, but if</p> <p>18 it's 5 microns in diameter, it won't get deep into</p> <p>19 the lungs.</p> <p>20 Q. You're going to cough it up, spit it</p> <p>21 out, do something with it.</p> <p>22 A. Correct.</p> <p>23 Q. All right, sir. So in asbestos</p> <p>24 exposure, not every fiber that you're exposed to gets</p> <p>25 actually inhaled, does it, sir?</p>	<p style="text-align: right;">Page 4934</p> <p>1 The macrophage can die and release the particles, and</p> <p>2 then another macrophage would come to get the</p> <p>3 particles again.</p> <p>4 Or the macrophage can get into the</p> <p>5 lymphatics and actually make its way into the lymph</p> <p>6 nodes. Or it can get on what we call the mucociliary</p> <p>7 escalator, the blanket of mucus that's lining your</p> <p>8 bronchial tubes, and can ride upwards and outwards</p> <p>9 from the lung and then be coughed up.</p> <p>10 Q. All right, sir. And we talk about the</p> <p>11 aerodynamic diameter that we discussed already.</p> <p>12 And you mentioned this a little bit.</p> <p>13 But if a fiber ends up being coated with something</p> <p>14 like tar, how would that affect the aerodynamic</p> <p>15 diameter of that fiber?</p> <p>16 A. Yeah, it can -- actually, the effect is</p> <p>17 the diameter would be increased, because instead of</p> <p>18 lining it up along the air flow and penetrating deep,</p> <p>19 then it moves more erratically and will tend to</p> <p>20 impact higher up in the respiratory tract.</p> <p>21 Q. All right.</p> <p>22 Dr. Roggli, this jury has heard about</p> <p>23 the different types of asbestos. I sometimes have</p> <p>24 called it the different flavors that it comes in.</p> <p>25 You're familiar with the different fiber types that</p>

<p style="text-align: right;">Page 4935</p> <p>1 make up asbestos. Correct, sir?</p> <p>2 A. Yes, sir.</p> <p>3 Q. Now, my question to you is, can all</p> <p>4 asbestos fibers, asbestos fiber types, can they all</p> <p>5 cause mesothelioma in humans, Doctor?</p> <p>6 A. Yeah, the ones that are used</p> <p>7 commercially, certainly amosite and crocidolite can</p> <p>8 cause disease. For chrysotile, it's not clear</p> <p>9 whether it's the chrysotile, itself, or its</p> <p>10 contaminant, another type of asbestos contaminant</p> <p>11 that can cause the disease. But chrysotile dust from</p> <p>12 Canada in sufficient doses can cause mesothelioma,</p> <p>13 yes.</p> <p>14 Q. Okay. Is there any type of asbestos</p> <p>15 that is known not to cause mesothelioma in people,</p> <p>16 sir?</p> <p>17 A. That's a good question. I'm not aware</p> <p>18 of one, though.</p> <p>19 Q. Okay. In your lab, sir, do you have a</p> <p>20 group of what you call control patients for your</p> <p>21 mesothelioma studies?</p> <p>22 A. Yes.</p> <p>23 Q. And why do you have control patients?</p> <p>24 A. Well, as I mentioned earlier, everybody</p> <p>25 has some amount of asbestos in their lung, so it's</p>	<p style="text-align: right;">Page 4937</p> <p>1 A. Tremolite is the most common fiber type</p> <p>2 that we find in our control group.</p> <p>3 Q. Now, we talked a little bit earlier</p> <p>4 about the 1,445 cases from your lab that went into</p> <p>5 your publication, sir. I'm calling that the 1,445</p> <p>6 case study. Okay?</p> <p>7 A. Yes.</p> <p>8 Q. Does this article on the 1,445 cases,</p> <p>9 does it state which asbestos fiber type was most</p> <p>10 commonly found in people with mesothelioma?</p> <p>11 A. Yes.</p> <p>12 Q. And what was that, sir?</p> <p>13 A. Yes, we found that -- our finding from</p> <p>14 1993 that amosite was the main type of asbestos that</p> <p>15 I was worried about being that we found it because we</p> <p>16 had so many insulators and shipyard workers in that</p> <p>17 regional study. But now when we have 268 cases of</p> <p>18 the 1,445 where we actually had done fiber analysis</p> <p>19 on them, that amosite was still the predominant fiber</p> <p>20 type across all the occupations that we studied.</p> <p>21 (LTC-12, Marked for Identification.)</p> <p>22 Q. Doctor, let me hand you Lorillard</p> <p>23 Tobacco Company Exhibit 12 that I ask that you</p> <p>24 identify, please.</p> <p>25 A. Yes, this is a copy of our studies</p>
<p style="text-align: right;">Page 4936</p> <p>1 not sufficient just to do an analysis and say, hey,</p> <p>2 there's asbestos present. You have to quantify the</p> <p>3 amount and then compare it to a population that has</p> <p>4 no known exposure to asbestos and no evidence of any</p> <p>5 asbestos-related disease. And that's our control</p> <p>6 group.</p> <p>7 Q. All right, sir. And what's the purpose</p> <p>8 of having the control group?</p> <p>9 A. To compare your cases with to see if</p> <p>10 they have an elevated or increased amount of asbestos</p> <p>11 in their lungs.</p> <p>12 Q. Now, the jury has heard, and I think</p> <p>13 you've mentioned the term "amphibole asbestos."</p> <p>14 A. Yes, sir.</p> <p>15 Q. What are we talking about there?</p> <p>16 A. Yeah, I think there's fine minerals that</p> <p>17 are a member of the amphibole group. The ones used</p> <p>18 to any extent in this country were amosite and</p> <p>19 crocidolite. And then there's three noncommercial</p> <p>20 amphiboles, and those are tremolite, actinolite, and</p> <p>21 anthophyllite.</p> <p>22 Q. And what's the most common amphibole</p> <p>23 asbestos fiber type that you found in lung tissue</p> <p>24 from the control patients in your lab, the ones that</p> <p>25 don't have meso?</p>	<p style="text-align: right;">Page 4938</p> <p>1 published in Ultrastructural Pathology in 2002 called</p> <p>2 "Malignant Mesothelioma and Occupational Exposure to</p> <p>3 Asbestos: A Clinicopathological Correlation of</p> <p>4 1,445 Cases."</p> <p>5 Q. And in there we would find, for example,</p> <p>6 your conclusion about amosite being the most common?</p> <p>7 A. I believe so, in the discussion, yes.</p> <p>8 Q. And this is -- this is now, what, about</p> <p>9 ten years old or so?</p> <p>10 A. It was 2002, so it's 14 years old.</p> <p>11 Q. Fourteen years old. Has amosite</p> <p>12 continued to predominate in the results of your lung</p> <p>13 fiber burden analyses, sir?</p> <p>14 A. Yes.</p> <p>15 Q. What's been your experience with finding</p> <p>16 crocidolite?</p> <p>17 A. We found that it's increasing in the</p> <p>18 number -- in the percentage of cases that have it.</p> <p>19 In other words, crocidolite was found two to three</p> <p>20 times as often in the second half of the study as in</p> <p>21 the first half of the cases that we looked at and</p> <p>22 examined. It didn't matter which disease you were</p> <p>23 looking at, it was true for all of the disease we</p> <p>24 studied, lung cancer, asbestosis, and mesothelioma.</p> <p>25 Q. And, Doctor, is that strange or unusual</p>

<p style="text-align: right;">Page 4939</p> <p>1 that you would be finding an increase in crocidolite?</p> <p>2 A. Yeah. And let me clarify. The</p> <p>3 crocidolite level was not necessarily increased,</p> <p>4 itself, concentration, but we were finding it in more</p> <p>5 patients. So it was two to three times as many</p> <p>6 patients in each category that we were finding</p> <p>7 crocidolite as before.</p> <p>8 And, no, when we did that analysis, we</p> <p>9 were -- I was aware that crocidolite was used in</p> <p>10 asbestos cement pipe in this country up until the</p> <p>11 mid-1990s; whereas, amosite was forbidden to be put</p> <p>12 in new insulation products that were sold after 1972.</p> <p>13 Q. Doctor, in the exhibit that we marked,</p> <p>14 the "Crocidolite and Mesothelioma," it's Lorillard</p> <p>15 11, that we talked about earlier.</p> <p>16 A. Yes.</p> <p>17 Q. You published on the crocidolite</p> <p>18 increasingly being identified in asbestos-related</p> <p>19 mesotheliomas in your lab, do you not, sir?</p> <p>20 A. Yes. We actually published an article</p> <p>21 before that which goes into detail called "25 Years</p> <p>22 of Fiber Analysis, What Have We Learned." And that</p> <p>23 was the first time we made the observation that, hey,</p> <p>24 we're seeing crocidolite more often in these days</p> <p>25 than we did earlier.</p>	<p style="text-align: right;">Page 4941</p> <p>1 sprayed on the girders of the high-rise buildings,</p> <p>2 and that contained both amosite and crocidolite, and</p> <p>3 that was a source of insulation products that had</p> <p>4 both in it.</p> <p>5 Q. And these studies that you published on,</p> <p>6 you have done the fiber burden analysis for -- to</p> <p>7 support the findings and the conclusions that you</p> <p>8 publish on. Is that correct, sir?</p> <p>9 A. Yes, sir.</p> <p>10 Q. And are fiber burdens done to determine</p> <p>11 the cumulative exposure that you might find in a</p> <p>12 person whose lung tissue you're studying?</p> <p>13 A. They are.</p> <p>14 Q. And what would you consider, Doctor, the</p> <p>15 most objective evidence of past significant exposures</p> <p>16 to asbestos?</p> <p>17 A. Finding an elevated level of the fiber</p> <p>18 type in the lung tissue samples.</p> <p>19 Q. By conducting the burden analysis.</p> <p>20 A. Correct.</p> <p>21 Q. Okay. And how long have lung tissue</p> <p>22 fiber burden studies been done, Doctor?</p> <p>23 A. The people who were really the pioneers</p> <p>24 of this work were publishing their initial studies in</p> <p>25 the early '70s, 1970s.</p>
<p style="text-align: right;">Page 4940</p> <p>1 Q. And when you find crocidolite in lung</p> <p>2 tissue that you examined, and these fiber burdens</p> <p>3 that you talked to us about, sir, does it appear by</p> <p>4 itself, alone?</p> <p>5 A. Well, the interesting thing we found in</p> <p>6 this study which is Exhibit 11 is that crocidolite</p> <p>7 most often correlated with finding amosite in the</p> <p>8 tissues. In fact, it was a very statistically</p> <p>9 significant correlation between finding amosite and</p> <p>10 finding crocidolite in the tissues.</p> <p>11 Q. And do you have an explanation, sir, for</p> <p>12 that correlation between amosite and crocidolite?</p> <p>13 A. Yes.</p> <p>14 Q. What is that, sir?</p> <p>15 A. Two basic explanations is that Dr. Chris</p> <p>16 Wagner had published decades ago, when asbestos was</p> <p>17 being shipped from South Africa, if somebody ordered</p> <p>18 amosite, for example, to be put in insulation</p> <p>19 products, if crocidolite was what they had available,</p> <p>20 that's what they would ship. It got mixed up.</p> <p>21 People didn't care so much back in those days what</p> <p>22 type of fiber type it was.</p> <p>23 The other was there were some insulation</p> <p>24 products that went on buildings, for skyscrapers.</p> <p>25 There was a spray stuff called Limpet spray that was</p>	<p style="text-align: right;">Page 4942</p> <p>1 Q. And, Doctor, what are pathology reports?</p> <p>2 A. Well, a pathology report would be an</p> <p>3 analysis by a pathologist of the individual case</p> <p>4 where they are describing the results of findings and</p> <p>5 examination of tissues for some other individual that</p> <p>6 they're sending the report to.</p> <p>7 Q. And, Dr. Roggli, did you review the</p> <p>8 pathology reports for Mr. Argento's diagnosis in this</p> <p>9 case?</p> <p>10 A. I did.</p> <p>11 Q. And did you review the pathology slides</p> <p>12 in this case?</p> <p>13 A. I did.</p> <p>14 Q. What are pathology slides, please?</p> <p>15 A. Well, what happens is the surgeon, as in</p> <p>16 this case, would go in and take a biopsy sample of</p> <p>17 the tumor, then send it to the laboratory. And then</p> <p>18 the laboratory, a pathologist or somebody, a trainee</p> <p>19 who is being supervised by a pathologist, will take</p> <p>20 that sample and cut it into pieces and put it</p> <p>21 in -- in different containers that they've carefully</p> <p>22 labeled to say where each piece came from. If the</p> <p>23 surgeon sends multiple samples, then each one of</p> <p>24 those would be treated as a separate sample. And</p> <p>25 then those are made into what we call paraffin</p>

<p style="text-align: right;">Page 4943</p> <p>1 blocks, which is just the tissue which is embedded in 2 wax. And then the technicians use a very sharp razor 3 to cut very thin sections. They're typically about 4 5 microns thick, and puts those on a glass slide, 5 stains them, and then that's what the pathologist 6 looks at under the microscope as a slide. 7 Q. All right. Then, if Mr. Argento -- if 8 the pathology on Mr. Argento had slides for you to 9 look at, why didn't you do a burden analysis on -- on 10 what was on the slides? 11 A. Because in this case all they -- all 12 they obtained was tumor tissue. And we believe, and 13 I have published about this, is you really need to 14 have lung tissue samples to analyze to determine what 15 the asbestos content is. And that you don't learn 16 anything by analyzing tumor tissue, nothing useful. 17 Q. Was there sufficient lung tissue 18 preserved to enable you to do a fiber burden analysis 19 if you had wanted to in this case? 20 A. There was not. 21 Q. And to your knowledge, I think I've 22 asked you, you don't know of any fiber burden 23 analysis that's ever been performed on Mr. Argento's 24 lung tissue. Correct? 25 A. Correct.</p>	<p style="text-align: right;">Page 4945</p> <p>1 two half-rounds and put them around a pipe. That 2 would be the pipe insulation. 3 And then blocks, blocks of insulation 4 that would go around these huge boilers that 5 were -- that were producing steam in an industrial 6 setting. So that was the main place. Then there 7 were a few other products that amosite went into. 8 But that was the main -- main uses of amosite. 9 Q. What does it mean, Doctor, when you talk 10 about asbestos being friable? 11 A. Friable is a term that I think that 12 the -- that the government, OSHA, NIOSH, EPA, used. 13 It has to do with whether it is easily crumbled. And 14 if it's easily crumbled, the material, that means it 15 can easily be dispersed into the air upon use. 16 Friable versus nonfriable, in which not so much is 17 released. 18 Q. Thank you, sir. 19 Now, this use that you've described of 20 amosite for insulation and use on pipes, and so 21 forth, sir, did that produce a use that was friable 22 or nonfriable? 23 A. That's friable. That's a friable 24 product. 25 Q. Okay. Now, have you studied the use of</p>
<p style="text-align: right;">Page 4944</p> <p>1 Q. All right, sir. 2 Let's talk quickly about asbestos uses, 3 sir. 4 As part of your work and your research 5 on asbestos and asbestos-related diseases, have you 6 studied the historical uses of the different asbestos 7 fiber types in the United States? 8 A. Yes. 9 Q. And have you studied the uses of amosite 10 in the United States? 11 A. Yes. 12 Q. And how long has amosite been used in 13 the U.S., sir? 14 A. Well, it was in insulation products 15 since -- since at least the '50s. And I think it 16 went back well before that, as well. 17 Q. And how long was it used? When did it 18 peak? 19 A. The peak for using -- of importing 20 asbestos of any type in the United States was 1973. 21 Q. And quickly, how was the amosite used in 22 the United States? 23 A. Mainly in insulation products. Most of 24 the amosite that was imported in the U.S. went into 25 what they call the half-rounds, which they would take</p>	<p style="text-align: right;">Page 4946</p> <p>1 crocidolite in the United States? 2 A. Yes. 3 Q. How long was crocidolite used in 4 products in the U.S.? 5 A. Again, I think that at least to the 6 1950s, and probably well before that it was used. 7 And then as late as the mid-1990s was still used in 8 asbestos in the pipe. 9 Q. The 1990s? 10 A. Yes. 11 Q. All right. 12 Was crocidolite used in insulation 13 material, as well? 14 A. The insulation material I mentioned, the 15 Limpet spray, that actually intentionally had amosite 16 and crocidolite in it. And then there was 17 contamination of -- of -- of crocidolite into amosite 18 products when they shipped something other than what 19 was ordered. 20 Q. All right. I next want to discuss with 21 you Mr. Argento's diagnosis. 22 A. Sure. 23 Q. Okay? What information did you review 24 regarding Mr. Argento's medical history, sir? 25 A. Well, I looked at the pathology</p>

<p style="text-align: right;">Page 4947</p> <p>1 materials that I received, of course. I looked at 2 the pathology report that went along with 3 that -- those pathology materials. I looked at the 4 histories and physicals, discharge summaries, 5 consultation reports, the surgical report. The 6 report of the surgeon when he took the biopsy sample. 7 And the radiology reports. 8 Q. And what information did you review 9 regarding Mr. Argento's work history? 10 A. The -- of course, I had subsequently 11 received deposition transcripts, I think that we've 12 discussed. But, also, there was some information 13 that was present actually in the medical records. 14 Q. And based on your review of these 15 materials, do you have a diagnosis regarding 16 Mr. Argento? 17 A. Yes. 18 Q. What is it, sir? 19 A. I believe he had a malignant pleural 20 mesothelioma. 21 Q. Now, let's talk about Mr. Argento's work 22 history for a moment. Okay? What's your 23 understanding of Mr. Argento's work history? 24 A. Well, his work history, I think it 25 included years at -- at different institutions,</p>	<p style="text-align: right;">Page 4949</p> <p>1 the types of occupations and the types of industries 2 where mesothelioma occurs most often in the United 3 States? 4 A. Yes. That's the -- one of the main 5 topics of our study on the 1,445 cases, which is LTC 6 Exhibit 12. 7 Q. All right. In that study, what did you 8 do in terms of grouping the members of that study 9 into occupations or industries, sir? 10 A. Yeah. We found that there were 12 11 industries that the cases fit into or six occupations 12 that 90 percent of the cases fit into. And then we 13 also had a significant group that were what we call 14 household contacts of asbestos workers. That is, for 15 example, somebody who, say a housewife who lived in a 16 house where a ship worker was and washed his clothes. 17 So we had those groups, and that's how we categorized 18 the cases. 19 Q. Why, sir, did you go to the trouble of 20 grouping the 1,445 patients, why did you go to the 21 trouble of grouping them by occupation or by 22 industry? 23 A. Well, one is to see what is the most 24 common circumstances where we're actually seeing 25 mesothelioma. And two is to see what sort of -- what</p>
<p style="text-align: right;">Page 4948</p> <p>1 15 years at one institution, and then 15 years with 2 Hoffmann-LaRoche. And at that latter institution, he 3 was involved with -- with insulation materials that 4 included removing insulation and -- and that he 5 actually had been trained and approved to work with 6 insulation. He had gotten a certificate to do that. 7 He also had some exposure, I think that 8 was claimed, from working with lawn products. 9 And he had some exposure that was claimed 10 through talc exposure, that first 15 years that I 11 mentioned, at a -- at a job site that I've forgotten 12 the name of now, that he worked for. It starts with 13 an "S," I think. 14 Then he had the claim from smoking Kent 15 cigarettes. 16 Q. All right, sir. I believe you do have 17 Plaintiff's Exhibit No. 2 in front of you there. 18 A. Exhibit 2. I do. 19 Q. And I believe that is some records that 20 indicate part of his work history, including the 21 occupation with the Hoffmann-LaRoche Company for 22 15 years. Is that correct, sir? 23 A. It does, yes. 24 Q. All right. Now, Doctor, have you as 25 part of your research, have you conducted studies on</p>	<p style="text-align: right;">Page 4950</p> <p>1 sort of categories or -- or job descriptions were 2 accounting for most of the cases we were seeing. 3 Q. Thank you, sir. 4 Now, you've got the study in your hand, 5 and we're not going to go through it page by page, or 6 anything like that, close to that, sir, but can you 7 tell the men and women of the jury whether the 8 information that you used in this study came from 9 that database of the mesothelioma patients that we 10 discussed earlier? 11 A. Yes. The information was stored there. 12 Again, it was my experience with the cases, and it's 13 a convenient way to store the information, so I used 14 that, yes. 15 Q. And the 12 industries with the highest 16 incidence of mesothelioma, you put them in a table in 17 that study, did you not, sir? 18 A. Yes, sir. 19 Q. Okay. And what is your understanding of 20 the work that Mr. Argento did when he was at 21 Hoffmann-LaRoche in the 1970s and 1980s? What's your 22 understanding of what work he did, and where would he 23 fit in that industry chart? 24 A. Well, he did maintenance work at that 25 institution, and that would be what I would call a</p>

<p style="text-align: right;">Page 4951</p> <p>1 chemical company.</p> <p>2 Q. Okay. And from your study of his work</p> <p>3 history, did you see that he did pipe insulation</p> <p>4 repair, removal, and maintenance?</p> <p>5 A. I did.</p> <p>6 Q. Okay. And you looked at his medical</p> <p>7 records as well, did you not?</p> <p>8 A. I did.</p> <p>9 Q. And in the medical records, did you see</p> <p>10 references to him telling his doctors about his</p> <p>11 occupation and where he worked and where he was</p> <p>12 exposed to asbestos?</p> <p>13 A. I did.</p> <p>14 Q. And did that inform your opinion, as</p> <p>15 well, sir?</p> <p>16 A. Yes, sir.</p> <p>17 Q. For example, in Lorillard Exhibit No. 2,</p> <p>18 the record of Dr. Vachani. I believe that's in</p> <p>19 evidence.</p> <p>20 MR. CEDILLO: Roman, can we put that up,</p> <p>21 please.</p> <p>22 Q. Dr. Vachani, the report states on</p> <p>23 January 11 of 2012, "Mr. Argento also wanted to</p> <p>24 clarify his prior asbestos exposures. He believes he</p> <p>25 was exposed to asbestos during his employment at</p>	<p style="text-align: right;">Page 4953</p> <p>1 down, Roman.</p> <p>2 Q. Dr. Roggli, what type of asbestos fibers</p> <p>3 are known to have been used for insulation products</p> <p>4 in the 1950 to 1970 time period when you were dealing</p> <p>5 with hot liquids and chemicals in the pipes that were</p> <p>6 involved?</p> <p>7 A. Well, I think that after 1956, a great</p> <p>8 majority of the insulation out there contained</p> <p>9 amosite and chrysotile asbestos. And that, for some</p> <p>10 of the types of insulation out there, they were only</p> <p>11 amosite.</p> <p>12 Q. And Dr. Roggli, based on your review of</p> <p>13 the case materials that you examined, did Mr. Argento</p> <p>14 work directly with pipe insulation at</p> <p>15 Hoffmann-LaRoche?</p> <p>16 A. Yes.</p> <p>17 Q. And based on the review of his testimony</p> <p>18 from his deposition, was Mr. Argento also around</p> <p>19 people who worked on the pipe insulation --</p> <p>20 A. Yes.</p> <p>21 Q. -- at Hoffmann-LaRoche?</p> <p>22 A. Yes, sir.</p> <p>23 Q. And by referencing your table with the</p> <p>24 industries and occupations and your 1,445 article,</p> <p>25 you mentioned to us that the industry he would have</p>
<p style="text-align: right;">Page 4952</p> <p>1 Hoffmann-LaRoche where he was employed for 16 years</p> <p>2 and was a supervisor of various sections, including</p> <p>3 the insulation department."</p> <p>4 And, Doctor, with that in mind, what is</p> <p>5 your understanding of the type of insulation products</p> <p>6 that Mr. Argento worked with at Hoffmann-LaRoche?</p> <p>7 A. That would be pipe covering insulation.</p> <p>8 Q. Do you recall Mr. Argento describing</p> <p>9 cement and half-moon pipe insulation?</p> <p>10 A. Yes.</p> <p>11 Q. And do you recall him mentioning a</p> <p>12 powdered product that was used and mixed?</p> <p>13 A. I think I would call that the cement,</p> <p>14 same as the cement.</p> <p>15 Q. And for that pipe insulation that he</p> <p>16 worked on, did Mr. Argento describe what was running</p> <p>17 through those pipes?</p> <p>18 A. Yes.</p> <p>19 Q. And what did -- what do you recall he</p> <p>20 was describing, sir?</p> <p>21 A. It was typically hot materials, such as,</p> <p>22 he mentioned the steam, I think it was alcohol and at</p> <p>23 least one other material that ran through the pipes</p> <p>24 that was hot.</p> <p>25 MR. CEDILLO: Okay. You can take that</p>	<p style="text-align: right;">Page 4954</p> <p>1 been working on was the oil and chemical?</p> <p>2 A. Yes.</p> <p>3 Q. And what number is that on your list of</p> <p>4 12, sir?</p> <p>5 A. On our list of 12, we have them listed</p> <p>6 in decreasing numbers of mesotheliomas that we saw,</p> <p>7 and so the fifth highest numbers of mesotheliomas</p> <p>8 were in the oil and chemical. We've had 88 of our</p> <p>9 cases were in the oil and chemical industry.</p> <p>10 Q. Now, can a worker be in more than one of</p> <p>11 the 12 categories, Doctor?</p> <p>12 A. Yeah, they can. And we try to put them</p> <p>13 in the predominant category in that circumstance.</p> <p>14 Q. Okay. And where is maintenance on that</p> <p>15 list?</p> <p>16 A. Well, that's in Table 2 under</p> <p>17 occupations. And under occupations there was a</p> <p>18 maintenance listed that accounted for 90 cases of</p> <p>19 mesothelioma. It was the third most common</p> <p>20 occupation that we saw in mesothelioma cases.</p> <p>21 Q. All right. Let's break that down.</p> <p>22 You just gave -- did you give a</p> <p>23 percentage as part of that answer?</p> <p>24 A. No.</p> <p>25 Q. Let me ask you about the percentage. If</p>

<p style="text-align: right;">Page 4955</p> <p>1 oil and chemical is the number five out of 12 in the 2 industry on that list that you have, from your study, 3 what percent of those type of workers had pleural 4 plaques? 5 A. Yeah. That's in a separate table we 6 looked at. And in oil and chemicals, I believe it 7 was 78 percent of them had pleural plaques. 8 Q. And on Table 2 that you mentioned, what 9 was the occupation with the highest incidence of 10 mesothelioma? 11 A. The pipefitter was number one, followed 12 by boilermaker, and then maintenance worker. 13 Q. Now, based on Table 2, what occupation 14 would Mr. Argento have been in during the years he 15 worked at Hoffmann-LaRoche? 16 A. Maintenance. 17 Q. And maintenance is number three on that 18 list? 19 A. Yes, sir. 20 Q. And what percentage of those patients in 21 that case study that were on the maintenance, number 22 three on the list, what percentage of those patients 23 had pleural plaques? 24 A. Eighty percent. 25 Q. Maybe I've got ahead of myself. Can you</p>	<p style="text-align: right;">Page 4957</p> <p>1 exposure of any disease we see from being exposed to 2 asbestos. 3 Q. Okay. And, Doctor, do you know of any 4 case report of a person with mesothelioma whose only 5 exposure was to Kent cigarettes that had pleural 6 plaques? 7 A. No. 8 Q. Have you ever found pleural plaques in 9 any of your cases of mesothelioma when people said 10 that the only exposure they had to asbestos was the 11 Kent cigarette? 12 A. Never. 13 Q. In your opinion, Doctor, what was the 14 cause of Mr. Argento's mesothelioma? 15 A. I believe it was caused by asbestos 16 exposure. 17 Q. And where -- do you have an opinion on 18 where that exposure would have taken place? 19 A. Yes. I think that most likely, based on 20 the information that I had of deposition, what he 21 told his doctors, that most likely it was from 22 exposure to insulation products when he worked for 23 Hoffmann-LaRoche for those 15 years. 24 Q. Now, you understand that Mr. Argento is 25 also claiming that he had a talc exposure that had</p>
<p style="text-align: right;">Page 4956</p> <p>1 tell us, again, please, what the pleural plaque is? 2 A. That is the most common marker that we 3 see in asbestos exposure. What it is is the scarring 4 of the pleura. Mainly a localized area of thickening 5 and scarring of the pleura. The vast majority of the 6 cases are caused by asbestos, especially when they're 7 bilateral, both sides of the chest, are caused by 8 asbestos. And if they had been there for 30 years or 9 more, then you often see calcification in them which 10 makes them more dense and makes it easier for the 11 radiologist to see. 12 Q. Okay. Now, from your review of the 13 medical records of Mr. Argento, did he have calcified 14 pleural plaques? 15 A. He did. There was a CT scan that showed 16 it was a small amount, but the radiologist believed 17 it was a definite amount of pleural thickening with 18 calcification bilaterally, which he suggested was 19 caused by asbestos. 20 Q. And, Doctor, in your opinion, is there a 21 correlation between heavy exposure in an occupational 22 setting and the presence of pleural plaques? 23 A. Yeah. The more that you're exposed, the 24 more likely you are to get plaques. But plaques 25 occur with probably the lowest level of occupational</p>	<p style="text-align: right;">Page 4958</p> <p>1 asbestos contamination and that that is claimed by 2 Mr. Argento to be a cause of his mesothelioma. You 3 understand that's in this case. Correct? 4 A. Yes, sir. 5 Q. Do you have any opinion, whatsoever, on 6 whether or not the talc was contaminated and could 7 have been a contributing cause? 8 A. In this case I don't have the 9 information about the contamination of the talc, no. 10 Q. And the basis for your opinion that Mr. 11 Argento's mesothelioma was caused by occupational 12 exposure at Hoffmann-LaRoche, give me again, please, 13 the basis for that opinion? 14 A. The fact that he had bilateral pleural 15 plaques. The fact that he was a maintenance worker. 16 The fact that he fit into the industry of oil and 17 chemical refineries, both of which have accounted for 18 long-term release. Fiber analysis we have done in 19 those cases show increased amounts of amosite which 20 correlates with exposure to insulation products. His 21 own deposition testimony and what he told his doctors 22 about being exposed to insulation. That makes it 23 most likely that that was the most important exposure 24 causing his disease. 25 Q. All right, sir. Now, you also</p>

<p style="text-align: right;">Page 4959</p> <p>1 understand, do you not, Doctor, that there's a claim 2 before this jury that Mr. Argento smoked the original 3 Kent and that that exposure to that filter 4 contributed to cause his mesothelioma? You 5 understand that that's a position. Correct? 6 A. Yes, sir. 7 Q. Do you have an opinion, sir, on that 8 issue of the Kent being a contributing factor? 9 A. I do. 10 Q. And what is that opinion, please? 11 A. I think it's unlikely. 12 Q. And why do you think it unlikely, sir? 13 A. Based on our own experience in analyzing 14 lung tissue in individuals who have smoked Kent 15 cigarettes as their only known exposure, and also 16 based on my reconsideration of the information from 17 the Longo study published in 1995. 18 Q. Now, sir, based on your reconsideration 19 of the Longo study, we've already talked about that 20 the reconsideration was the basis of your change of 21 position on that, have you formed an opinion on the 22 reliability or validity of the Longo study in the 23 Cancer Research paper that was published? 24 MR. MAIMON: Objection. 25 THE COURT: Sidebar.</p>	<p style="text-align: right;">Page 4961</p> <p>1 if he has -- whatever his opinion is on that, I think 2 that it would inform the jury on what weight to give 3 the competing experts. That's a function of experts 4 that come in to give competing opinions. 5 THE COURT: This exceeds the scope of 6 this witness' area of expertise. His critique of 7 Longo is based upon the EPA articles -- 8 MR. MAIMON: Berman and Crumb. 9 THE COURT: Thank you, I couldn't 10 remember Berman. And so to ask him this ultimate 11 question, again, based upon someone who is not coming 12 in here to testify, I think it's also a James v. Ruiz 13 situation, so you cannot ask him that question. 14 MR. CEDILLO: All right. 15 THE COURT: All right. The objection is 16 sustained. 17 (End of sidebar.) 18 THE COURT: The objection is sustained. 19 Please do not answer that question. 20 MR. CEDILLO: May I proceed, your Honor? 21 THE COURT: Yes. 22 Q. In your 1,445 study, sir, that's a 23 peer-reviewed article, is it not? 24 A. Yes. 25 Q. And you did address whether smoking</p>
<p style="text-align: right;">Page 4960</p> <p>1 (At sidebar.) 2 MR. MAIMON: Your Honor, I have the 3 expert report served by the defendants in this case 4 for Dr. Roggli specific to the Kent exposure. And he 5 does not in here give any criticism of what Dr. Longo 6 talked about the reliability. The most that he says 7 is that "Although some studies have suggested fiber 8 release from smoking Kent cigarettes, analyses of 9 lung tissue samples from four individuals allegedly 10 exposed to asbestos from Kent Micronite filters 11 showed no detectable crocidolite fibers," and then 12 citing to his own work on that. 13 So he doesn't talk about the reliability 14 of that testing at all in his expert report. 15 And there's absolutely nothing in here 16 which would hint -- he would not qualify as an expert 17 in that. So it's beyond the scope of the proffer and 18 it's beyond the disclosure. 19 THE COURT: Okay. 20 MR. CEDILLO: Your Honor, I think -- I 21 think this is an expert witness. He's already 22 criticized Dr. Longo. And as a scientist, as a 23 medical researcher, I think he is entitled to give 24 his opinion on whether or not Dr. Longo's work 25 actually contributes to the scientific literature, or</p>	<p style="text-align: right;">Page 4962</p> <p>1 original Kent cigarettes is a likely cause 2 mesothelioma, did you not? 3 A. Yes. 4 Q. And, Doctor, if the original Kent had 5 caused or contributed to cause these mesotheliomas, 6 would you expect to find crocidolite in the lung 7 tissue? 8 A. Yes. 9 Q. And did you? 10 A. No. 11 Q. Have you ever found crocidolite in the 12 lung tissue in your lab when people had other sources 13 of crocidolite exposure? 14 A. You mean other, like, occupational 15 exposures? 16 Q. Yes. 17 A. Sure, yes. 18 Q. The fact that you're not finding 19 crocidolite in people who claim to have smoked Kent 20 doesn't mean that you can't find crocidolite for some 21 reason. When it's there, you can find it, can't you? 22 A. Yes, we found crocidolite in quite a 23 number of cases. In that article "Crocicolite and 24 Mesothelioma," in 15 cases it was the only commercial 25 amphibole present in increased levels.</p>

<p style="text-align: right;">Page 4963</p> <p>1 Q. You're familiar with the case report by 2 Dodson and Hammar that was published in 2006. I 3 believe you have that as Plaintiff's Exhibit No. 7? 4 A. I'm not sure if I have it up here. I 5 don't have it up here. 6 Q. Let me hand it to you, sir, a copy of 7 it. 8 A. Thank you. 9 Q. And my question to you on this, if you 10 take a moment to review it, it was admitted as 11 Exhibit 7. 12 THE COURT: No, it was not offered for 13 admission. 14 MR. CEDILLO: Oh, it was only ID'd. I'm 15 sorry. 16 THE COURT: Correct. 17 Q. Well, here's my question, sir: Would 18 you characterize this article as an epidemiological 19 study? 20 A. No. 21 Q. What is it? 22 A. It's a case report. 23 Q. And do you have any information 24 regarding the subject of this Dodson and Hammar 25 article?</p>	<p style="text-align: right;">Page 4965</p> <p>1 article. And he did. And he's going to, if you'll 2 permit me, tell this jury that they had it all wrong, 3 that her only exposure wasn't Kent cigarettes. In 4 fact, her husband worked at that Exxon plant and 5 brought home all kinds of flavors of asbestos, and he 6 found it in the lung tissue. 7 MR. MAIMON: I don't know about flavors, 8 your Honor, but I do know that Dodson and Hammar 9 documented all asbestos fiber types in their article. 10 So they didn't get it wrong, either. But that's the 11 problem with these type of questions. What 12 Mr. Cedillo is doing, he's testifying, and not Dr. 13 Roggli. If Dr. Roggli wants to testify about what he 14 analyzed from this case and actually did an analysis 15 on what he found, what he concluded to that, I have 16 no objection. But I do have an objection of him 17 starting to talk about whether or not the husband 18 worked at Exxon, because that's not in. 19 THE COURT: Actually, it is. It 20 says -- 21 MR. MAIMON: I didn't get it wrong, 22 either. 23 THE COURT: It says for the record on 24 page 683, "The husband of the individual reported 25 herein was reported as working as an engineer in an</p>
<p style="text-align: right;">Page 4964</p> <p>1 A. Yes. 2 Q. And what is your assessment of the work 3 and asbestos exposure histories that the authors 4 provided in that article? 5 MR. MAIMON: Objection. 6 THE COURT: Sidebar. 7 (At sidebar.) 8 THE COURT: Someone bring that article. 9 Yes. The basis for your objection? 10 MR. MAIMON: The basis for my objection, 11 your Honor, is that the way that the question is 12 phrased -- I know that earlier on Mr. Cedillo had 13 asked Dr. Roggli if he had also analyzed lung tissue. 14 And I know that he has. I don't object to him 15 testifying about his own analysis of what he's done. 16 But to be the conduit for hearsay testimony, hearsay 17 evidence about what was told to whom, and all sorts 18 of things like that, I think is improper for an 19 expert to do. So I just wanted to have my concerns 20 raised at sidebar. I don't know what he's going to 21 say. 22 MR. CEDILLO: Your Honor, I'll establish 23 that he worked on this case. The question is did he 24 form an assessment of the work and occupational 25 histories that the authors here related in the</p>	<p style="text-align: right;">Page 4966</p> <p>1 industry where asbestos was most likely in place." 2 MR. MAIMON: Does it say Exxon? 3 THE COURT: Not where I read. 4 MR. MAIMON: Again, so that's my -- my 5 objection is to have this witness be a conduit for 6 hearsay testimony, which other Courts have said is 7 improper. If he wants to talk about what he analyzed 8 and compare it to what the article says, I'm prepared 9 to cross-examine. 10 THE COURT: The authors do say, too, Dr. 11 Roggli in here and in their references, Roggli and 12 Benning, 1990, "Asbestos Bodies in Pulmonary Hilar 13 Lymph Nodes," published in Modern Pathology. 14 Remind me again because it's been a 15 while. This is Plaintiff's Exhibit 7. We have 16 progressed since then. How did you utilize this in 17 connection with -- 18 MR. MAIMON: When we had Dr. Moline on 19 the stand, Dr. Moline referenced this as a learned 20 treatise to support the proposition that crocidolite 21 asbestos has been found in the lungs of mesothelioma 22 patients. She did not say -- and Mr. Cedillo is 23 wrong. Every time he says her only known exposure to 24 asbestos was Kent cigarettes, that's not what it 25 says. It says only documented, historically</p>

<p style="text-align: right;">Page 4967</p> <p>1 documented exposure to asbestos.</p> <p>2 But the authors here acknowledge that she</p> <p>3 had other exposures because they found it in her lung</p> <p>4 tissue. So no one is hiding the ball. Nothing is</p> <p>5 nefarious here as suggested by the questioning. Dr.</p> <p>6 Roggli looked at the slides, looked at the lung</p> <p>7 tissue, did his own analysis, and came to a different</p> <p>8 conclusion. That's fair game. What's not fair is to</p> <p>9 start talking about the hearsay statements that are</p> <p>10 contained in pleadings in that case, and depositions</p> <p>11 in that case, and all sorts of things in that case,</p> <p>12 which I'm assuming that they want to start having</p> <p>13 this witness testify to, and that's what I object to.</p> <p>14 MR. CEDILLO: The section, your Honor,</p> <p>15 begins with the title where they say that the woman's</p> <p>16 documented exposure was to asbestos from smoking the</p> <p>17 Kent cigarette. He came on board and he clarified.</p> <p>18 THE COURT: Are you planning on going</p> <p>19 into pleadings and --</p> <p>20 MR. CEDILLO: No.</p> <p>21 THE COURT: Okay. You're going to stick</p> <p>22 to this article?</p> <p>23 MR. CEDILLO: The article, itself.</p> <p>24 THE COURT: Go.</p> <p>25 MR. CEDILLO: Okay.</p>	<p style="text-align: right;">Page 4969</p> <p>1 as the asbestos in the filtering agent of the</p> <p>2 original Kent cigarette?</p> <p>3 A. It was not.</p> <p>4 Q. Doctor, are there any epidemiological</p> <p>5 studies of mesothelioma in people whose only exposure</p> <p>6 to asbestos was from smoking original Kent</p> <p>7 cigarettes?</p> <p>8 A. No.</p> <p>9 Q. Are there any epidemiological studies of</p> <p>10 pleural plaques in people whose only exposure to</p> <p>11 asbestos was from smoking original Kent cigarettes?</p> <p>12 A. Not epidemiological studies, nor even</p> <p>13 case reports.</p> <p>14 Q. And if someone had a bilateral calcified</p> <p>15 pleural plaque, what does that indicate to you as to</p> <p>16 the level of asbestos exposure that he had?</p> <p>17 A. Most of the time, it indicates</p> <p>18 occupational level of exposure. In fact, we've</p> <p>19 published a study recently that shows what's called</p> <p>20 the positive predictive value of finding plaques in</p> <p>21 patients with mesotheliomas is 99 percent. That</p> <p>22 means 99 percent of the time you'll find elevated</p> <p>23 asbestos content when you do fiber analysis.</p> <p>24 Q. All right, sir.</p> <p>25 And then you've given us opinions</p>
<p style="text-align: right;">Page 4968</p> <p>1 THE COURT: Okay.</p> <p>2 (End of sidebar.)</p> <p>3 Q. The question is simply do you have an</p> <p>4 assessment of the work and asbestos exposure history</p> <p>5 that the authors provided in this article, sir?</p> <p>6 A. Yes.</p> <p>7 Q. And the title of the article was,</p> <p>8 "Pleural Mesothelioma in a Woman Whose Documented</p> <p>9 Past Exposure to Asbestos Was From Smoking</p> <p>10 Asbestos-Containing Filtered Cigarettes."</p> <p>11 Correct?</p> <p>12 A. Yes.</p> <p>13 Q. And we know that can only be the Kent?</p> <p>14 A. Yes.</p> <p>15 Q. It was between '52 to '56. Correct?</p> <p>16 A. That's my understanding.</p> <p>17 Q. Did you do a fiber-burden analysis or an</p> <p>18 analysis of any kind on the patient who was the</p> <p>19 subject of this study, sir?</p> <p>20 A. I did.</p> <p>21 Q. Okay. And in that fiber burden, what</p> <p>22 did you find?</p> <p>23 A. As did Dr. Dodson, I found amosite to be</p> <p>24 present.</p> <p>25 Q. To your knowledge, was amosite ever used</p>	<p style="text-align: right;">Page 4970</p> <p>1 regarding Dr. Longo's tests that he conducted for his</p> <p>2 Cancer Research article, have you not, sir?</p> <p>3 A. Yes.</p> <p>4 Q. And did Dr. Longo have controls in the</p> <p>5 testing that he conducted, sir, if you recall?</p> <p>6 A. Not that I recall.</p> <p>7 Q. Would you need a control from the -- the</p> <p>8 time period that you're testing the cigarette to make</p> <p>9 the testing more reliable, in your opinion?</p> <p>10 MR. MAIMON: Objection.</p> <p>11 THE COURT: Sidebar.</p> <p>12 (At sidebar.)</p> <p>13 MR. MAIMON: I thought we dealt with</p> <p>14 this, your Honor. The reliability of the testing.</p> <p>15 Dr. Roggli's -- he didn't even remember whether or</p> <p>16 not there were controls or not, but now to start</p> <p>17 eliciting expert testimony on how to reliably do</p> <p>18 cigarette filter release testing is beyond the scope</p> <p>19 of his, number one, expertise, and number two,</p> <p>20 disclosure. So we object.</p> <p>21 MR. CEDILLO: It's a general question</p> <p>22 for a scientist that does these kinds of studies</p> <p>23 whether or not you should have a control. Is that a</p> <p>24 good thing to have?</p> <p>25 THE COURT: Well, he's a scientist that</p>

<p style="text-align: right;">Page 4971</p> <p>1 does fiber burden, pathology-related studies as 2 opposed to smoking filter studies. 3 MR. CEDILLO: Okay. 4 THE COURT: So the objection is 5 sustained. 6 Before you go, how much further do you 7 anticipate? 8 MR. CEDILLO: I anticipate finishing 9 before 12:30. 10 THE COURT: Okay. Do you have any 11 further direct? 12 MR. BERGER: No, your Honor. 13 THE COURT: Okay. Then we'll take the 14 break after your direct. 15 (End of sidebar.) 16 THE COURT: That objection is sustained. 17 Please don't answer that question. 18 Q. Dr. Roggli, are all of your publications 19 peer-reviewed, sir? 20 A. The ones that I have listed as 21 peer-reviewed publications are, yes. 22 Q. There are publications that you have 23 that are not peer-reviewed, and therefore you don't 24 list them. That's a better question. 25 A. Well, no, I mean, chapters in books</p>	<p style="text-align: right;">Page 4973</p> <p>1 a plaintiff group, you expect to see that in part of 2 the disclosure that goes along with the published 3 article. 4 Q. So let's say an article gets disclosed 5 that it was -- that it was funded by a plaintiff's 6 group, after it's published with the support of the 7 plaintiff's group, it's now available for people to 8 use and point to to support opinions, isn't it? 9 A. Yes. 10 MR. CEDILLO: Thank you, Dr. Roggli. 11 That's all I have for you right now, sir. 12 THE COURT: Any further direct, Mr. 13 Berger? 14 MR. BERGER: No, your Honor. Thank you. 15 THE COURT: Thank you. 16 We're going to take the lunch break now 17 and then we'll come back and go to the 18 cross-examination of Dr. Roggli. 19 So leave your notebooks here. Remember 20 to wear your juror badges. Remember all the 21 discussions I've had with you with regard to doing 22 any research or any discussions about this case. 23 Thank you very much. And a member of my 24 staff will pick you up downstairs at 1:30. 25 Thank you.</p>
<p style="text-align: right;">Page 4972</p> <p>1 typically are not peer-reviewed. They're invited. 2 The textbooks I've written, those typically are not 3 peer-reviewed. Some publishers will send out a 4 textbook and ask somebody to review it, but most 5 times they're not. And letters to the editor, 6 editorials, there are a number of those I've written. 7 I'm not sure to what degree those are peer-reviewed 8 either. 9 Q. Now, it's a big deal to have something 10 peer-reviewed, isn't it, sir? 11 A. It's considered to be important in terms 12 of what it adds to our scientific understanding and 13 to the medical literature, yes. 14 Q. So if you get something in a journal, it 15 typically can be used by people to say that it 16 informs their opinions. Correct? 17 A. Sure. 18 Q. And when something is supported by a 19 plaintiff's group so that it can get published, sir, 20 as a medical researcher and scientist, does that 21 affect the weight that you would give it? 22 A. Well, yeah. These days, we expect there 23 to be disclosure in the -- in the text. Most 24 journals will require that. If there is funding, for 25 example, somebody has done research that's funded by</p>	<p style="text-align: right;">Page 4974</p> <p>1 (The jury leaves the courtroom.) 2 THE COURT: Thank you, and we are off 3 the record. 4 (A lunch recess is taken.) 5 (The jury enters the courtroom. The 6 following takes place in the presence of the jury.) 7 THE COURT: Please be seated. Make sure 8 your cell phones are turned off. If you are bringing 9 back a beverage for the first time, why don't you 10 open it now so we can all hear it and not later on. 11 Thank you. 12 Cross-examination, Mr. Maimon. 13 MR. MAIMON: Thank you, your Honor. 14 CROSS-EXAMINATION BY MR. MAIMON: 15 Q. Good afternoon, Dr. Roggli. How are 16 you? 17 A. Good. 18 Q. This is not the first time you and I 19 have met. Correct? 20 A. That's correct. 21 Q. Both in depositions. Correct? 22 A. Yes. 23 Q. And you are under oath and giving sworn 24 testimony when you give depositions. Right? 25 A. Sure.</p>

<p style="text-align: right;">Page 4975</p> <p>1 Q. As well as trials before. Is that 2 correct? 3 A. Yes. 4 Q. All right. You introduced yourself to 5 the members of the jury this morning. You told them 6 that you are an expert in the field of pathology. Is 7 that correct? 8 A. Yes, sir. 9 Q. Okay. And you mentioned a little bit 10 about some of your education and training and talked 11 about being board certified in the field of 12 pathology. Do you recall that? 13 A. Yes, sir. 14 Q. Okay. Board certification is not 15 something that is peculiar or particular to the field 16 of pathology, but all fields of medicine or all 17 specialties within medicine have their respective 18 boards. Correct? 19 A. Specialties, yes, they do. 20 Q. And those board certifications, whether 21 you're a pulmonologist or an oncologist or a 22 pathologist or an expert in occupational and 23 environmental medicine, that testing for the level of 24 competence that you spoke about earlier this morning 25 for the Board of Pathology, that would be the same</p>	<p style="text-align: right;">Page 4977</p> <p>1 primarily you're called upon to confirm or call into 2 question the diagnosis of the patient. Right? 3 A. Well, partly. But we are also involved 4 with causation. Any time that a surgeon takes a 5 biopsy that's potentially a mesothelioma, we're 6 always looking to see if the surgeon also obtained 7 pleural plaques. If he did, we mention that in our 8 report. If the surgeon happens to get lung tissue 9 for some reason at the biopsy, we always look for 10 asbestos bodies, and if we find them we report that. 11 But we are involved with some degree to causation, 12 but not specific products. 13 Q. Okay. So that, generally speaking, the 14 question of whether or not asbestos caused this 15 disease or not, in general, that's something you 16 might be involved with at the hospital level. Right? 17 A. Correct. 18 Q. But the question of this product or that 19 product or looking into the occupational history of 20 this patient, that's not something that you get 21 involved in with the hospital. Right? 22 A. True. 23 Q. In fact, within the context of your 24 practice, as a matter of routine, it's not your 25 routine to sit down with patients and get an</p>
<p style="text-align: right;">Page 4976</p> <p>1 for any board certification. Correct? 2 A. I believe so. 3 Q. Okay. And I think one of the things 4 that you talked about that you are involved 5 from -- as a pathologist in the diagnosis of 6 mesothelioma. Correct? 7 A. Yes, sir. 8 Q. And I think you mentioned that part of 9 the numbers of cases of mesothelioma that you've seen 10 have been people who happen to come to the hospital 11 at Duke or at the VA who had mesothelioma; and in the 12 course of looking to treat those patients, their 13 slides, their pathology, their biopsies would come to 14 your laboratory to confirm or question the diagnosis 15 of mesothelioma. Correct? 16 A. Yes. 17 Q. When in the hospital setting, when you 18 are -- somebody has a biopsy taken, whether it's at 19 surgery or at autopsy, and you're called upon to look 20 at that, that diagnosis does not call for a 21 determination of which product or products they may 22 have been exposed to 30, 40 years prior contributed 23 to their mesothelioma. Correct? 24 A. That's true. 25 Q. So within the role of pathologist,</p>	<p style="text-align: right;">Page 4978</p> <p>1 occupational history. Correct? 2 A. Not my routine. I've done it before, 3 but not my routine. 4 Q. I understand. You may have done it on a 5 few occasions. Right? 6 A. Yes. 7 Q. All right. So for instance -- and 8 you've been chosen to be members of -- a member of 9 various panels that look at the diagnosis of 10 mesothelioma. Correct? 11 A. Yes, sir. 12 Q. Okay. One of those is the U.S./Canadian 13 Mesothelioma Panel. Right? 14 A. Yes, sir. 15 Q. That, again, is dealing with the 16 question of diagnosis of mesothelioma in the patient 17 whose sample you're looking at. Right? 18 A. Almost exclusively, yes. 19 Q. And the question of what particular 20 exposure might have caused that mesothelioma, that's 21 not something that the U.S./Canadian Mesothelioma 22 Panel is involved in. Correct? 23 A. Yeah. It comes up, and I can remember 24 an occasion in recent time it has. 25 Q. And you're aware of other specialties,</p>

<p style="text-align: right;">Page 4979</p> <p>1 such as -- the jury heard Dr. Jacqueline Moline who 2 is an expert in occupational and environmental 3 medicine, you are not board certified in that area. 4 Correct? 5 A. That's correct. 6 Q. You rendered a report August 27, 2013, 7 in this case confirming that Mr. Argento suffered and 8 died from malignant mesothelioma. Correct? 9 A. Yes. 10 Q. Okay. And that is a -- mesothelioma is 11 a -- is a painful disease, is not? 12 A. It tends to be, yes, sir. 13 Q. And you would have expected from looking 14 at Mr. Argento's medical records that he would have 15 suffered significant pain from his mesothelioma. 16 Correct? 17 A. Yes. 18 Q. Okay. Now, and one of the things that 19 you noted in Mr. Argento's medical records is the 20 presence of bilateral calcified plaques. Correct? 21 A. Yes. 22 Q. Okay. And based on that and that alone, 23 the diagnosis of mesothelioma and the presence of 24 bilateral calcified plaques, you're able to determine 25 that, more likely than not, his mesothelioma was</p>	<p style="text-align: right;">Page 4981</p> <p>1 And anything other than asbestos 2 exposure, you have no evidence caused or contributed 3 to Mr. Argento's mesothelioma. Correct? 4 A. Correct. 5 Q. Okay. Now, in addition to the report 6 that you issued on August 27, 2013 -- 7 MR. MAIMON: May I approach, your Honor? 8 THE COURT: Yes. That's P-130? 9 MR. MAIMON: Yes, your Honor. 10 (P-130, Marked for Identification.) 11 Q. I'm going to hand you what we've marked 12 as Plaintiff's Exhibit 130 for identification. And 13 if you take a look at that, that's a report that you 14 authored on October 2, 2013. Is that correct? 15 A. It says October 3. Close enough. 16 Q. October -- no, look at the second page. 17 A. It says October 3, too. 18 THE COURT: Do you want to check these, 19 Counsel? Mine says October 3. 20 MR. CEDILLO: Mine says October 3. 21 MR. MAIMON: Okay. Okay. Can I borrow 22 one of those? 23 MR. CEDILLO: Sure. I'm okay, Judge. 24 Q. And in that you indicated, you start off 25 that letter by saying, "You have requested my further</p>
<p style="text-align: right;">Page 4980</p> <p>1 caused by prior exposure to asbestos. Correct? 2 A. Correct. 3 Q. Okay. Now, you mentioned some other 4 potential causes of mesothelioma this morning. Do 5 you recall that? 6 A. Yes. 7 Q. I think I recalled you talking about 8 radiation therapy. Right? 9 A. Yes. 10 Q. And that's when somebody has a type of a 11 cancer and they specifically radiate that tumor, 12 there are some cases of mesothelioma that have 13 developed in later years. Right? 14 A. Yes. 15 Q. You have no evidence that that played 16 any role in Mr. Argento's mesothelioma. Correct? 17 A. That's correct. 18 Q. You mentioned some other non-asbestos 19 type of materials. Erionite from Turkey, 20 fluoro-edenite from Greece, you have no evidence that 21 those materials played any role, whatsoever, in Mr. 22 Argento's mesothelioma. Correct? 23 A. That's correct. But I believe I said 24 before the fluoro-edenite was from Sicily. 25 Q. You're right. Okay.</p>	<p style="text-align: right;">Page 4982</p> <p>1 opinion concerning the etiology of the mesothelioma 2 in the case of Michael C. -- Mr. Michael C. Argento 3 as diagnosed in my prior report dated August 27, 4 2013." Correct? 5 A. Yes. 6 Q. And aside from putting the 7 word "the" twice there, I quoted that correctly, did 8 I not? 9 A. Yes. 10 Q. Okay. And when you use the term 11 "etiology," what you're talking about is what caused 12 his mesothelioma. Correct? 13 A. Yes. 14 Q. Okay. Now, in order to give an opinion 15 on this subject, you were provided with -- by the 16 lawyers who retained you, with material such as Mr. 17 Argento's deposition. Correct? 18 A. Yes. 19 Q. And you are testifying here on behalf of 20 Lorillard Tobacco Company. Correct? 21 A. Yes. 22 Q. And you're testifying here on behalf of 23 Hollingsworth & Vose. Correct? 24 A. Yes. 25 Q. Okay. Did you see in Mr. Argento's</p>

<p style="text-align: right;">Page 4983</p> <p>1 testimony his discussion of using joint compound on 2 various home renovation projects? 3 A. Yeah. I forgot to mention that when I 4 described his exposures. 5 Q. Right. And did you see his testimony 6 about using various lawn products? 7 A. Yes. 8 Q. And did you see his testimony about 9 working at Hoffmann-LaRoche? 10 A. Yes. 11 Q. Did you see his testimony about working 12 at the "S" company, the Shulton Company, if I can jog 13 your memory? 14 A. Yes, sure. 15 Q. And then did you see his testimony about 16 smoking Kent cigarettes? 17 A. Yes. 18 Q. Okay. And let's take a look at these. 19 And so this would be the potential contributory 20 asbestos exposures in this case. Those five. Right? 21 A. Yes. 22 Q. Okay. Now, the jury has already seen 23 Mr. Argento's testimony in this case. And I'm going 24 to give you sections of it, and if it's okay with 25 you, ask you some questions. Okay?</p>	<p style="text-align: right;">Page 4985</p> <p>1 A. Correct. 2 Q. Okay. How many times did Mr. Argento 3 use the joint compound? 4 A. Let's see. I don't recall that, but I'm 5 sure it probably says in here, in his testimony. I 6 don't recall it specifically? I think he's saying, 7 "You did this work? 8 "The 15 years I was there. I don't know. 9 Three times, twice." 10 Is that what you're referring to? 11 Q. Yes. 12 A. In my opinion, that would not be a 13 contributing factor. 14 Q. Okay. So if that testimony was accurate 15 and that's the extent to which he used the joint 16 compound, you would reject that as a cause of his 17 mesothelioma. Correct? 18 A. Correct. 19 Q. Okay. And with regard to the Scotts 20 Turf Builder, you understand that at various times 21 Scotts Turf Builder products had -- withdrawn. 22 One minute. 23 Let's stick with the joint compound. 24 Mr. Argento had malignant pleural 25 mesothelioma. Correct?</p>
<p style="text-align: right;">Page 4984</p> <p>1 A. Sure. 2 (P-131, Marked for Identification.) 3 Q. Okay. And this is Exhibit 131 for 4 identification, which is the section of Mr. Argento's 5 deposition testimony where he talks about the joint 6 compound work that he did. And did you have an 7 opportunity before you wrote your report to read Mr. 8 Argento's testimony about this? 9 A. I believe so. 10 Q. Okay. Now, it's true, is it not, Dr. 11 Roggli, that you reject any potential contribution to 12 Mr. Argento's mesothelioma from his use of the joint 13 compound? 14 A. No. 15 Q. So do you believe -- 16 A. We published two cases of -- of 17 individuals with mesothelioma that we believe was 18 related to exposure to joint compound. 19 Q. What I'm asking you, sir, is whether or 20 not in Mr. Argento's case, given the history that he 21 gave there, whether or not you reject that exposure 22 as contributing to his mesothelioma? 23 A. No, I don't have enough information to 24 tell one way or another. 25 Q. So you can't say one way or another?</p>	<p style="text-align: right;">Page 4986</p> <p>1 A. Yes. 2 Q. And that's mesothelioma that arises in 3 the lining of his lung, in the pleura. Right? 4 A. Yes, sir. 5 Q. There's another type of mesothelioma 6 that arises in the peritoneum, the lining of the 7 abdomen. Correct? 8 A. Yes. 9 Q. And that's called peritoneal 10 mesothelioma. Correct? 11 A. Yes, sir. 12 Q. Okay. It's true, is it not, that in the 13 past you have testified that exposure to 14 chrysotile-containing products can cause peritoneal 15 mesothelioma? 16 A. I may have, but not since 1997, I don't 17 believe. 18 Q. Okay. And you changed your mind about 19 that. Right? 20 A. Yeah, we did a study, actually, that was 21 published this year, finally published this year. It 22 was originally written by Dr. Oury in 1997, but sat 23 around for all those years until we finally published 24 it. 25 Yeah, but from that study we did in 1997</p>

<p style="text-align: right;">Page 4987</p> <p>1 was sort of an eye opener saying, oh my gosh, we 2 don't have any cases of mesothelioma in which only 3 chrysotile or tremolite were identified. 4 Q. Okay. And that was based, again, on 5 your lung digestion studies. Correct? 6 A. Correct. 7 Q. Okay. Scotts Turf Builder, you rejected 8 that as a potential contributing cause to Mr. 9 Argento's mesothelioma. Correct? 10 A. Correct. 11 Q. Okay. So that if the lawyers here were 12 to have asked you prior to you coming in to give 13 testimony, or prior to you writing the report, in 14 this case, was the joint compound or the Turf Builder 15 a cause of Mr. Argento's mesothelioma, you would have 16 told them it was not. Correct? 17 A. Correct. 18 Q. Okay. The next discussion there is 19 asbestos insulation at Hoffmann-LaRoche. Do you see 20 that? 21 A. Yes. 22 Q. Now, earlier today, or right before we 23 broke, you were talking about your article of the 24 1,445 cases that you had reviewed up until that time. 25 Right?</p>	<p style="text-align: right;">Page 4989</p> <p>1 Q. Okay. Are you aware that 2 Hoffmann-LaRoche was a pharmaceutical company? 3 A. I may have been. I don't recall. 4 Q. And is it your testimony that that 5 business here in New Jersey, Hoffmann-LaRoche, is 6 equivalent to a chemical plant, a chemical refinery? 7 A. In a lot of ways in the sense that the 8 chemical refineries chemically had lots of 9 insulation. There was lots of pipes that were 10 insulated. And to the extent he had lots of pipes in 11 the 141 buildings that were insulated that he was 12 responsible for, I think it was similar in that 13 respect. 14 Q. Well, there were a lot of industries in 15 that article that you talk about that have a lot of 16 pipes. Right? 17 A. Sure. 18 Q. And I misplaced it, but I'll find it in 19 a bit. 20 In any event, you -- you were not aware 21 that Hoffmann-LaRoche was a pharmaceutical -- do you 22 recall Mr. Argento testifying that -- that 23 Hoffmann-LaRoche was purely a pharmaceutical company 24 when he worked there? 25 A. I may have at the time that I reviewed</p>
<p style="text-align: right;">Page 4988</p> <p>1 A. Yes, sir. 2 Q. Okay. And those cases primarily came 3 from your files. Right? 4 A. Yeah, they're all from my files. 5 Q. Even though you had coauthors, the cases 6 came from your files. Right? 7 A. Yes. 8 Q. Okay. What percentage of those cases 9 were -- came to you through your work as a consultant 10 in litigation? 11 A. Well, somewhere -- well, 80 to 12 85 percent, I would say. 13 Q. Okay. And you mentioned that you 14 categorized the different cases of mesothelioma first 15 by industry and then by trade. Right? 16 A. Yes. 17 Q. And for Mr. Argento, you put his 18 industry in, I think you said, chemical and oil for 19 Hoffmann-LaRoche? 20 A. What we did is when we did those, we put 21 oil and chemical plants together, oil and chemical 22 refineries together. 23 Q. Okay. And you categorized Mr. Argento 24 under the industry oil and chemicals. Right? 25 A. The oil and chemical part of that, yes.</p>	<p style="text-align: right;">Page 4990</p> <p>1 the deposition. I just didn't recall it. 2 Q. Okay. You accepted Hoffmann-LaRoche as 3 a potential contributory asbestos exposure towards 4 his mesothelioma. Correct? 5 A. Yes. 6 Q. Okay. And then you noted, also, that 7 Mr. Argento worked at Shulton Company. Correct? 8 A. Yes. 9 MR. DUNST: I'm going to object to this. 10 May we approach? 11 THE COURT: Sure. 12 (At sidebar.) 13 THE COURT: Yes. 14 MR. DUNST: Your Honor, in Dr. Roggli's 15 report -- 16 THE COURT: Which one? 17 MR. DUNST: Well, as to they're both the 18 same day and they both say essentially the same 19 thing. 20 MR. MAIMON: No, one was a diagnostic 21 report, August 27th. 22 MR. DUNST: Well, there's two of these 23 reports both October 3rd. 24 MR. MAIMON: This is the only one I'm 25 using.</p>

Roggli - cross

<p style="text-align: right;">Page 4991</p> <p>1 MR. DUNST: Okay. There's another one. 2 Let's say it's this October 3rd report. 3 THE COURT: Okay. 4 MR. DUNST: On the very last page, Dr. 5 Roggli says, "Exposure to asbestos from 6 tremolite-containing talc may also have been a 7 contributing factor." 8 I respectfully suggest to the Court that 9 this is insufficient for Dr. Roggli to render any 10 opinions regarding that my client's talc being a 11 substantial contributing factor. He, in fact, did 12 say that he didn't have enough information on direct 13 examination, but certainly here this "may" is the 14 same thing as "possible." 15 And he would not have been able to 16 testify to that on direct examination; and for 17 Mr. Maimon to cross-examine him about something that 18 he wouldn't have been able to testify to on direct, I 19 think is wrong. 20 I don't know what Dr. Roggli is going to 21 say, but certainly he's never disclosed anything 22 regarding my client's product, and to go into it at 23 all I think is improper. 24 THE COURT: You had this report prior to 25 today. Correct?</p>	<p style="text-align: right;">Page 4993</p> <p>1 fair cross-examination. 2 MR. DUNST: No, but I'm basing it, your 3 Honor, from a disclosure point of view. He says 4 "may." "May" is insufficient in order to be able to 5 have an opinion for the jury, and therefore I think 6 exploring it on cross-examination may be equally 7 improper. 8 MR. CEDILLO: Judge, I'm not a party in 9 the fight except timing. I'm always the last one, 10 and they're always telling me to hurry up. 11 THE COURT: I don't tell you that. 12 MR. CEDILLO: All of us want to hurry 13 up. Except you. 14 THE COURT: Well, that would be 15 improper. Get to your point. 16 MR. CEDILLO: It's exceeding the scope. 17 I mean, I don't open up the area for discussion I get 18 from him that he has no opinion on it. 19 THE COURT: Well, okay. Your opinions 20 with regard to this. So it does not exceed the 21 scope. It did come up, and so it's proper cross. 22 And it also goes to credibility that the witness 23 testified he did not have enough information, so it 24 goes to those two issues. 25 All right. Continue.</p>
<p style="text-align: right;">Page 4992</p> <p>1 MR. DUNST: Of course. 2 THE COURT: Okay. I just wanted to make 3 sure. 4 And on direct examination, you did 5 inquire with regard to -- 6 MR. CEDILLO: To elicit the response 7 that he had no opinion one way or the other. But he 8 didn't have enough information and I let it go. I 9 didn't go there at all. 10 THE COURT: Okay. And -- 11 MR. MAIMON: So this is within the scope 12 of the examination. It's in the scope of -- he 13 didn't say that the pipe insulation at 14 Hoffmann-LaRoche was a cause, either, in his report. 15 He says, "Exposure to asbestos by applying and 16 removing pipe insulation is a well-recognized cause 17 of mesothelioma in the United States." 18 There's a next step here which is 19 proper, and in certain circumstances it can and in 20 certain circumstances it may not. I'm going to 21 explore what he put in his report, the basis for it. 22 The fact that he told this jury he had no information 23 at all is belied by his report, it goes to not only 24 his credibility, but His whole task here was the 25 etiology of Mr. Argento's mesothelioma. I think it's</p>	<p style="text-align: right;">Page 4994</p> <p>1 (End of sidebar.) 2 THE COURT: You may continue, 3 Mr. Maimon. 4 Q. And so, Dr. Roggli, in your report you 5 did address asbestos-containing talc at Shulton. 6 Correct? 7 A. Yes. 8 Q. And you accepted this as a potential 9 contributory asbestos exposure for Mr. Argento. 10 Correct? 11 A. Assuming it was asbestos-containing 12 talc, yes. 13 Q. Okay. But in the last -- well, let's 14 get -- let's get there in a minute. Ah-ha. Okay. 15 The talc can be contaminated with tremolite asbestos. 16 Correct? 17 A. That's my understanding. 18 Q. Okay. And you've written about that in 19 the past, have you not? 20 A. I have. 21 Q. Okay. And with regard to -- you were 22 shown some medical records from Mr. Argento, LTC-1 23 and 2, where he talked about asbestos exposure at 24 Hoffmann-LaRoche. Do you recall those? 25 A. Yes.</p>

<p style="text-align: right;">Page 4995</p> <p>1 Q. Okay. Now, there's nothing that you 2 know about Kent cigarettes which would reveal to the 3 person who was smoking them in the 1950s that they 4 contained asbestos. Correct?</p> <p>5 A. Do you understand my question?</p> <p>6 Q. You mean just by looking at the 7 scientific literature?</p> <p>8 Q. Sure. The person who was smoking Kent 9 cigarettes with the Micronite filter containing 10 asbestos between 1952 and 1956, to the best of your 11 knowledge -- and you shared with us some of your 12 knowledge about what was in there -- was there 13 anything about that that would alert the smoker to 14 the fact that it contained asbestos?</p> <p>15 A. No.</p> <p>16 Q. And similarly, somebody working with the 17 product that they called talc, if it had some 18 tremolite contamination in it, there's no way that 19 the user just by looking at it would know that it's 20 contaminated with asbestos. Right?</p> <p>21 A. Well, you said two different things. 22 You said tremolite, then you said asbestos.</p> <p>23 Q. Let me be clear.</p> <p>24 A. Okay.</p> <p>25 Q. If Mr. Argento was working near an</p>	<p style="text-align: right;">Page 4997</p> <p>1 Q. Okay. So we have that. And then for 2 the Kent cigarettes, you rejected the potential 3 contributory asbestos exposure towards his 4 mesothelioma. Correct?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. Now, we talked a little bit about 7 that, or you talked to counsel for Lorillard about 8 that before, but it's true, is it not, Dr. Roggli, 9 that if the only asbestos exposure that Mr. Argento 10 had that anybody could find out about no matter how 11 much they investigated -- and we'll talk about lung 12 digestion in a minute -- but just by talking to him 13 and everybody he knew, was to Kent cigarettes, you 14 would still reject it as a contributory cause of his 15 mesothelioma. Correct?</p> <p>16 A. Yes.</p> <p>17 Q. Okay. And it's your understanding that 18 he smoked approximately a pack and a half a day of 19 those Kents. Correct?</p> <p>20 A. Yes. I think one place in the medical 21 records mentioned two packs a day, but I don't know 22 if that goes back to that period in time.</p> <p>23 Q. In your report you put a pack and a half 24 a day. Right?</p> <p>25 A. That's correct.</p>
<p style="text-align: right;">Page 4996</p> <p>1 asbestos-contaminated talc at Shulton, there was no 2 way a person working with such a product would know 3 that it has asbestos in it if it's not labeled that 4 way. Right?</p> <p>5 A. Correct.</p> <p>6 Q. Okay. So that the fact that Mr. Argento 7 told his doctors that he was exposed to asbestos or 8 was working with asbestos at Hoffmann-LaRoche doesn't 9 mean he wasn't exposed to asbestos in other ways, as 10 well. Correct?</p> <p>11 A. True.</p> <p>12 Q. In fact, one of the things that you have 13 found is that some people can be exposed to asbestos 14 and not even know it. Right?</p> <p>15 A. Yes.</p> <p>16 Q. Because you could take a look at their 17 lungs and find the asbestos in there when they don't 18 even know that they were exposed. Correct?</p> <p>19 A. Yes.</p> <p>20 Q. And, in fact, there could be people who 21 had exposures that they knew about which are revealed 22 when you look at their lung tissue, and asbestos 23 exposures that they didn't know about it which are 24 revealed on lung digestion. Correct?</p> <p>25 A. That's also true, yes.</p>	<p style="text-align: right;">Page 4998</p> <p>1 Q. Okay. And even if he were smoking two 2 packs a day of Kent cigarettes during that period of 3 time and that were his only asbestos exposure, you 4 would say it played no role and his mesothelioma was 5 just spontaneous. Just happened. Right?</p> <p>6 A. Correct.</p> <p>7 Q. Okay. And if he smoked four packs of 8 cigarettes a day, Kent cigarettes with the asbestos 9 filter in it, you still would say didn't cause it, 10 just spontaneous. Right?</p> <p>11 A. I've never seen anybody who did that. 12 But if there were such a case, probably.</p> <p>13 Q. Okay. Now, you mentioned that you have 14 a database where all this information is there. 15 Correct?</p> <p>16 A. The information that I indicated, yes.</p> <p>17 Q. Okay. And one of the fields that you 18 put in your database is whether or not who sent you 19 the case to review. Correct?</p> <p>20 A. Yes.</p> <p>21 Q. And this would have been a defense 22 lawyer who sent you the case. Right?</p> <p>23 A. Yes, sir.</p> <p>24 Q. Okay. And you were asked before whether 25 or not you testified both for plaintiffs and</p>

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<p style="text-align: right;">Page 4999</p> <p>1 defendants. It's true, is it not, first of all, you 2 never worked for my firm Levy Konigsberg. Right? 3 A. That's correct. 4 Q. And it's true, is it not, that within 5 the last several years the vast majority of your 6 consultation work has been for the defense. Correct? 7 A. Yes. 8 Q. In the database, so it's reflected who 9 sent you the case, a defense attorney or a 10 plaintiff's attorney. Right? 11 A. Yes. 12 Q. And then it says whether or not the 13 result that you reached was positive for the person 14 who sent it to you. Correct? 15 A. Or negative or neutral. 16 Q. Or neutral. Right. Then you talk about 17 the different exposures there. Right? 18 A. Yes. 19 Q. Within the database -- first of all, do 20 you have the entry of the database for Mr. Argento 21 here with you? 22 A. No. 23 Q. Okay. Within the database entry, did 24 you include the asbestos-containing talc at Shulton? 25 A. I think so.</p>	<p style="text-align: right;">Page 5001</p> <p>1 A. Okay. 2 Q. Okay. First of all, in your report, you 3 mention that from 1970 to 1985 he worked for 4 Hoffmann-LaRoche in the maintenance department, paint 5 shop division, where he painted all pipe insulation 6 located in 141 buildings. He also removed and 7 replaced insulation. 8 Did I read that correctly? 9 A. I believe so, yes. 10 Q. Okay. So first of all, one of the 11 things Mr. Argento talked about was when he joined 12 Hoffmann-LaRoche in 1970 he went into the paint 13 department and was painting everything, including 14 insulation. Right? 15 A. Yes. 16 Q. It's your understanding that he wasn't 17 designated as the pipe painter, he was painting all 18 sorts of things which included pipe insulation. 19 Right? 20 A. Yeah, it was part of his maintenance 21 work. 22 Q. Okay. And he was specifically within 23 the paint shop division of the maintenance 24 department. Correct? 25 A. Yes.</p>
<p style="text-align: right;">Page 5000</p> <p>1 Q. You think so? 2 A. I didn't write it down as being talc, 3 but I think I included that 15 years at Shulton as 4 part of the exposure, yes. 5 Q. Okay. And as far as you know, the only 6 possible asbestos-containing product that Mr. Argento 7 was disposed to at Shulton was potentially 8 asbestos-containing talc. Correct? 9 A. The only one I heard about. 10 Q. And that's the one in your report. 11 Correct? 12 A. Yes. 13 Q. Okay. Now, let's talk a little bit 14 about Mr. Argento's time at Hoffmann-LaRoche. Okay? 15 A. Sure. 16 (P-132, Marked for Identification.) 17 Q. I'm handing you what I marked as 18 Plaintiff's Exhibit 132, and those are the portions 19 of Mr. Argento's testimony which the jury has seen 20 which discussed his work at Hoffmann-LaRoche. And 21 you reviewed this material. Correct? 22 A. Yes. 23 Q. Okay. And if you could take a look at 24 the end of the transcript here, pages 397 and 398. 25 Just let me know when you're there. Okay?</p>	<p style="text-align: right;">Page 5002</p> <p>1 Q. Okay. Are painters part of your 2 industries that are at risk for mesothelioma in your 3 1,445 article? 4 A. I think. I have -- I think I've got the 5 article here. I think the painters are under 6 construction industry. I have to look back at it to 7 be sure. 8 Q. Take a look at Table 1, if you could. 9 A. Yeah. So you can see there under C, 10 "Construction includes construction worker, laborer, 11 carpenter, painter, drywall/plasterer." 12 Q. Okay. And so even though this is the 13 types of workers there, what determines whether or 14 not they get mesothelioma is their exposure to 15 asbestos. Right? 16 A. Yes. 17 Q. You could have a construction worker who 18 never touches asbestos and you wouldn't expect him to 19 get mesothelioma. Correct? 20 A. That's correct. 21 Q. Okay. Now, the -- when you take a look 22 at a history -- so let's go on. 23 The pipe painting, do you believe that 24 Mr. Argento was exposed to a significant dose of 25 asbestos in painting pipe insulation? Just painting</p>

<p style="text-align: right;">Page 5003</p> <p>1 it?</p> <p>2 A. Just doing the painting part?</p> <p>3 Q. Just doing the painting.</p> <p>4 A. I doubt it.</p> <p>5 Q. Okay. What you believe potentially</p> <p>6 exposed him to significant asbestos was removing and</p> <p>7 replacing insulation. Right?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. Now, one of the things -- there</p> <p>10 are a couple of things that you look at as an expert</p> <p>11 when you're evaluating causation from an exposure.</p> <p>12 One is the dose. Right?</p> <p>13 A. Yes.</p> <p>14 Q. And the dose is how much asbestos is in</p> <p>15 the air and how long the person is breathing</p> <p>16 that -- that air. Right?</p> <p>17 A. Yes.</p> <p>18 Q. And then one of the things that you look</p> <p>19 at is fiber type. Right?</p> <p>20 A. Yes.</p> <p>21 Q. Okay. Because, as you noted earlier</p> <p>22 today, certain types of asbestos are more potent at</p> <p>23 causing mesothelioma than other types. Right?</p> <p>24 A. Yes.</p> <p>25 Q. Okay. And so let's take a look at what</p>	<p style="text-align: right;">Page 5005</p> <p>1 wearing a respirator when doing this work?</p> <p>2 A. A mask.</p> <p>3 Q. Okay. And do you recall him testifying</p> <p>4 that he was certified? Right?</p> <p>5 A. Yes.</p> <p>6 Q. And OSHA certification requires wearing</p> <p>7 of respirators. Correct?</p> <p>8 A. Not familiar with all the details of</p> <p>9 OSHA certification for that sort of work.</p> <p>10 Q. Is it your understanding that people who</p> <p>11 are OSHA certified to remove asbestos from in place</p> <p>12 wear respirators?</p> <p>13 A. I would be surprised if they weren't.</p> <p>14 But, again, I haven't read the details of that, that</p> <p>15 litigation -- that legislation.</p> <p>16 Q. Given your expertise, you would expect</p> <p>17 it to be a respirator. Correct?</p> <p>18 A. Yes. Some form of protection of some</p> <p>19 type.</p> <p>20 Q. Now, one of the things we want to talk</p> <p>21 about when we're talking about a period like 1970 to</p> <p>22 1985, is, for instance, when did all this happen.</p> <p>23 Correct? That would be important to know. Right?</p> <p>24 A. Yes.</p> <p>25 Q. All right. And do you see on page 397</p>
<p style="text-align: right;">Page 5004</p> <p>1 Mr. Argento said about his work removing and</p> <p>2 replacing mesothelioma -- I mean, asbestos pipe</p> <p>3 covering at -- at Hoffmann-LaRoche. Okay?</p> <p>4 A. Sure.</p> <p>5 Q. The first thing, did you notice that he</p> <p>6 talked about the fact that they set up clean rooms or</p> <p>7 pure rooms? Right?</p> <p>8 A. Yes.</p> <p>9 Q. And do you notice that he talked about</p> <p>10 it being almost like a cocoon where there would be</p> <p>11 plastic all around? Do you recall that?</p> <p>12 A. Yes.</p> <p>13 Q. Do you recall him testifying about</p> <p>14 wetting down the insulation before it was ever cut?</p> <p>15 Do you recall that?</p> <p>16 A. Yes.</p> <p>17 Q. Do you recall him testifying that</p> <p>18 anything that was cut off would be placed in an</p> <p>19 enclosed plastic bag? Right?</p> <p>20 A. Yes.</p> <p>21 Q. And that's important to you because if</p> <p>22 it's not enclosed, later on it has the potential to</p> <p>23 release more asbestos later on. Right?</p> <p>24 A. Sure.</p> <p>25 Q. And do you recall him testifying about</p>	<p style="text-align: right;">Page 5006</p> <p>1 and 398 that Mr. Argento testified that he was only</p> <p>2 in charge of removing insulation into the 1980s when</p> <p>3 he became part of the insulation department?</p> <p>4 A. Yes.</p> <p>5 Q. Okay. Now, it's true, is it not, that</p> <p>6 the decrease -- that asbestos was banned from use in</p> <p>7 insulation products starting in 1972?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. So that whatever was being</p> <p>10 replaced and put back on to those pipes after 1972</p> <p>11 should not have been asbestos at all. Right?</p> <p>12 A. Depends.</p> <p>13 Q. Okay. Asbestos -- there was pipe</p> <p>14 covering that was put back on those pipes the way</p> <p>15 that Mr. Argento described it that would not have</p> <p>16 been asbestos in the 1980s. Correct?</p> <p>17 A. It depends.</p> <p>18 Q. Depends on what?</p> <p>19 A. It depends on -- my understanding is</p> <p>20 that whatever companies have in their inventory was</p> <p>21 not forbidden. They did not totally have to throw it</p> <p>22 away. I was never told that was the case. So if</p> <p>23 some companies had old insulation in inventory, they</p> <p>24 could have used it even if it had asbestos in it even</p> <p>25 in the 1980s. They couldn't buy insulation</p>

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<p style="text-align: right;">Page 5007</p> <p>1 after '72, my understanding, that had asbestos in it, 2 but if they had it in their inventory they could use 3 it. 4 Q. So in order for the new insulation that 5 Mr. Argento put on in the 1980s that contained 6 asbestos, it would have had to have lasted from 1972 7 into the 1980s, not been used up, and then he would 8 have had to put that on. Correct? 9 A. Yes. 10 Q. And do you recall his testimony that 11 whenever he would do that he would be in a clean room 12 and he would be wearing the suit that he talked 13 about, the protective clothing, and the respirator? 14 Right? 15 A. Yes. 16 Q. Okay. And so it would be important for 17 you when assessing what contribution, if any, his 18 exposures at Hoffmann-LaRoche had to his mesothelioma 19 to know whether or not the products that he was 20 putting on contained asbestos. Right? 21 A. Yes. 22 Q. Okay. And, now, you talked a little bit 23 about that amosite was used in insulation products. 24 Correct? 25 A. Yes.</p>	<p style="text-align: right;">Page 5009</p> <p>1 A. Currently they do that, yes. 2 Q. And part of that analysis is able to 3 determine what fiber type of asbestos might be in the 4 insulation material that's going to be removed. 5 Correct? 6 A. Sure. 7 Q. Okay. Have you looked into any 8 abatement records from Hoffmann-LaRoche during the 9 time period that Mr. Argento worked there? 10 A. I have not seen such records, no, sir. 11 Q. Okay. Now, you mentioned that there are 12 some types of insulation that are exclusively 13 amosite. Right? 14 A. Yes. 15 Q. Okay. And you have no evidence in this 16 case to support the contention that the type of 17 insulation used at Hoffmann-LaRoche was that pure 18 amosite. Correct? 19 A. That's correct. 20 Q. Okay. There were types of insulation 21 materials including pipe coverings that had 22 chrysotile. Right? 23 A. As part of the composition, yes. And 24 prior to 1956, I think there were some in which 25 chrysotile was the only component.</p>
<p style="text-align: right;">Page 5008</p> <p>1 Q. Okay. And the fiber type that he might 2 have been exposed to at Hoffmann-LaRoche would be an 3 important consideration for you. Correct? 4 A. Sure. 5 Q. Okay. Now, it's true, is it not, Dr. 6 Roggli, that you have no evidence of what type of 7 fiber was in any of the insulation material that Mr. 8 Argento came in contact with at Hoffmann-LaRoche? 9 Correct? 10 A. No direct evidence. That's true. 11 Q. Okay. And you know that he was taking 12 out asbestos. Correct? 13 A. Yes. 14 Q. Another word for taking out asbestos is 15 abatement. Right? 16 A. Yes. 17 Q. You know that records are maintained of 18 abatements pursuant to regulations? 19 A. They are currently. I'm not sure about 20 how far back that goes. 21 Q. Okay. Do you know that when contractors 22 go in and do abatements, they analyze bulk samples? 23 They take sampling and determine whether or not what 24 I'm taking out is asbestos; and if it is, there are 25 special regulations to take it out. Right?</p>	<p style="text-align: right;">Page 5010</p> <p>1 Q. Okay. And, again, you don't know what 2 type of asbestos fiber was in the -- in the 3 insulation that Mr. Argento came into contact with 4 Hoffmann-LaRoche. Correct? 5 A. From his description of what he did and 6 what the company did and what the plant was doing, it 7 almost certainly was in that time period it would 8 have to be amosite-containing insulation. 9 Q. Okay. And the fact that it was hot 10 applications. Is that right? 11 A. That's part of it, yes. 12 Q. How hot was it? 13 A. I do not know. 14 Q. Well, wasn't that one of the factors in 15 whether or not to use an amosite-containing covering 16 as opposed to a chrysotile-containing pipe covering, 17 the temperature range that you're applying? 18 A. I'm not familiar with that. I'm more 19 familiar with the chemical corrosion of chrysotile 20 for the Navy, for example, and shipbuilding you had 21 to use amosite. 22 Q. Okay. So that, for instance, there was 23 some type -- there were types of materials that would 24 be going through some of the piping, such as acids or 25 caustic fluids that would require an amphibole.</p>

<p style="text-align: right;">Page 5011</p> <p>1 Right?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. Are you aware of whether or not</p> <p>4 any of those caustic fluids or acids were going</p> <p>5 through the piping of a pharmaceutical company in the</p> <p>6 1970s and '80s?</p> <p>7 A. I don't know.</p> <p>8 Q. Okay.</p> <p>9 (P-133, Marked for Identification.)</p> <p>10 Q. I'm going to hand you what I've marked</p> <p>11 as Plaintiff's Exhibit 133 for identification.</p> <p>12 You're familiar with this article. Correct?</p> <p>13 A. Um-hum.</p> <p>14 Q. And you're familiar with it, it's an</p> <p>15 article in the American Review of Respiratory Disease</p> <p>16 from 1976. Correct?</p> <p>17 A. Yes.</p> <p>18 Q. And this is exactly around the time</p> <p>19 period that Mr. Argento started working over at -- or</p> <p>20 was working at Hoffmann-LaRoche. Right?</p> <p>21 A. Yes.</p> <p>22 Q. And this is published by an individual</p> <p>23 by the name of Dr. Margaret Becklake. Correct?</p> <p>24 A. Yes.</p> <p>25 Q. And you have recognized Dr. Becklake as</p>	<p style="text-align: right;">Page 5013</p> <p>1 out. Do you see that?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. In addition, she talks about</p> <p>4 cement products being chrysotile. Correct?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. And for tremolite, she has "Used</p> <p>7 in the chemical industry as fillers and filters."</p> <p>8 Correct?</p> <p>9 A. Yes.</p> <p>10 Q. And "talc fillers." Do you see that?</p> <p>11 Did I read that correctly?</p> <p>12 A. Yes. Or is that "filters"? I can't</p> <p>13 tell.</p> <p>14 Q. Maybe "filters." I don't know.</p> <p>15 A. Okay.</p> <p>16 Q. There's "fillers and filters." Do you</p> <p>17 see that?</p> <p>18 A. Yes.</p> <p>19 Q. Can you tell what the talc is?</p> <p>20 A. No. It's -- I'm not sure if it says</p> <p>21 "filters" or "fillers."</p> <p>22 Q. Okay. And for crocidolite, it lists</p> <p>23 "Textiles." Do you see that?</p> <p>24 A. For crocidolite. "Textiles." Yeah, I</p> <p>25 see it, yes.</p>
<p style="text-align: right;">Page 5012</p> <p>1 an expert in asbestos-related diseases. Correct?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. And if you take a look on page</p> <p>4 191 of the article, there is a table, Table 2. Do</p> <p>5 you see that?</p> <p>6 A. Yes.</p> <p>7 Q. And that talks about the varieties of</p> <p>8 asbestos properties, sources, and usage. Correct?</p> <p>9 A. Yes.</p> <p>10 Q. And it talks about the different fiber</p> <p>11 types of asbestos, the same ones you talked about</p> <p>12 earlier today. Correct?</p> <p>13 A. Yes.</p> <p>14 Q. Okay. And under -- there's one section</p> <p>15 that's called "Serpentine." Do you see that?</p> <p>16 A. Yes.</p> <p>17 Q. And serpentine, the type of asbestos</p> <p>18 that that has is chrysotile. Right?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. And Dr. Becklake in this article</p> <p>21 in 1976 talks about insulation being the</p> <p>22 type -- being under the "Chrysotile" column. Right?</p> <p>23 A. That's what she says.</p> <p>24 Q. And she says that at this time, 1976,</p> <p>25 she drops two asterisks there that it's being phased</p>	<p style="text-align: right;">Page 5014</p> <p>1 Q. "Pressure pipes." Right?</p> <p>2 A. Yes.</p> <p>3 Q. "Cement products"?</p> <p>4 A. Yes.</p> <p>5 Q. That would be that asbestos cement pipe.</p> <p>6 Right? And those are pipes that are used as -- for</p> <p>7 sewage and for water to go through underground.</p> <p>8 Right?</p> <p>9 A. Correct.</p> <p>10 Q. Okay. And then it talks about felts for</p> <p>11 plastics. Correct?</p> <p>12 A. Yes.</p> <p>13 Q. Okay. Now, that fiber type -- oh,</p> <p>14 another issue that you look at is dose. Correct?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. And you cannot say here with</p> <p>17 medical certainty or scientific certainty what Mr.</p> <p>18 Argento's dose of asbestos was from working at</p> <p>19 Hoffmann-LaRoche, can you?</p> <p>20 A. Correct.</p> <p>21 Q. And you don't -- you had no air</p> <p>22 monitoring data. Correct?</p> <p>23 A. Yes.</p> <p>24 Q. And if he was wearing a respirator and</p> <p>25 was wetting down the insulation and working in the</p>

<p style="text-align: right;">Page 5015</p> <p>1 pure rooms and bagging the pipe covering as he -- as 2 he described in the 1980s, you can't say that he had 3 a dose that would cause mesothelioma, can you? 4 A. I think in consideration of all the 5 information available in this case, I think I would 6 say yes. 7 Q. One of the things that you have 8 testified to before is that wetting down a pipe 9 before you cut it can decrease the likelihood of 10 breathing in significant fibers of respirable 11 asbestos. Correct? 12 A. It certainly reduces the amount of 13 exposure, yes, sir. 14 Q. Okay. And so you don't -- you cannot 15 tell the jury how much asbestos Mr. Argento was 16 exposed to at Hoffmann-LaRoche, can you? 17 A. That's correct. 18 Q. Okay. You've also testified in the 19 past, have you not, that wearing a respirator mask 20 further reduces the likelihood of breathing in 21 significant amounts of fibers? Correct? 22 A. It reduces the amount, yes, sir. 23 Q. Okay. And if Mr. Argento was wearing a 24 mask, is it still your testimony that he was exposed 25 to enough asbestos -- you see here that he's talked</p>	<p style="text-align: right;">Page 5017</p> <p>1 mesothelioma. Correct? 2 A. If it were only chrysotile, then I would 3 not have enough information to say that more likely 4 than not it would cause it. 5 Q. Okay. Now, you mentioned earlier today 6 that there's a possibility that some insulation by 7 mistake would have crocidolite where it was meant to 8 have amosite. Do you recall that? 9 A. Yes. 10 Q. Okay. You have no proof or no evidence 11 that that was ever the case of anything that happened 12 at Hoffmann-LaRoche, do you? 13 A. No. 14 Q. Okay. If that was the case and there 15 was some crocidolite in some insulation there, it 16 would be true that all you could say is that he -- if 17 he also smoked Kent cigarettes and was exposed to 18 crocidolite also in the workplace, that both would 19 contribute to the crocidolite content of his lung and 20 it would not be possible to say the relative 21 contribution between the two. Is that fair? 22 A. I would agree with the first part of 23 that; but the latter part I don't think more likely 24 than not would result in enough in the lung to be a 25 contributing factor.</p>
<p style="text-align: right;">Page 5016</p> <p>1 about always wearing protective clothing? 2 A. I remember him discussing about 3 protective clothing, yes. 4 Q. Okay. Take a look at page 399, starting 5 on line 12. "And did you -- every time that you went 6 into one of these plastic cocoons to supervise the 7 removal of any insulation, did you follow that 8 procedure every time?" 9 And he says, "That's the only thing you 10 could do." 11 "QUESTION: And did you wear the 12 protective clothing every time? 13 "ANSWER: Paper suit. Paper suit every 14 time. 15 "QUESTION: And did you get vacuumed off 16 every time?" 17 And he says, "Every time." 18 Do you see that? 19 A. Yes. 20 Q. So not only did Mr. Argento have the 21 paper suit on and the mask on, but he would get 22 vacuumed off. Is that your recollection? 23 A. Yes. 24 Q. If the asbestos used at Hoffmann-LaRoche 25 was chrysotile, that would not have caused his</p>	<p style="text-align: right;">Page 5018</p> <p>1 Q. I'm talking about when you breathe in 2 asbestos, it gets into your lung. Right? 3 A. Yes. 4 Q. And the more asbestos you breathe in, 5 the more is there. Right? 6 A. Yes. 7 Q. And you can't tell by looking under your 8 microscope which fiber came from which product, can 9 you, aside from knowing if they're both the same 10 fiber type in the products? Right? 11 A. Well, that's true. But we've analyzed 12 cases in which their only known exposure was through 13 smoking Kents and found no crocidolite. But we found 14 people who smoked Kents and worked in a working 15 environment where they're exposed to crocidolite and 16 we did find crocidolite. 17 Q. Do you recall testifying as follows: 18 "All one could say is that if the individual smoked 19 Kent cigarettes" -- 20 MR. CEDILLO: Your Honor, I object. 21 THE COURT: Sidebar. 22 (At sidebar.) 23 MR. CEDILLO: That's improper 24 impeachment, your Honor. He's confronting him with 25 something. There is the question that was asked.</p>

<p style="text-align: right;">Page 5019</p> <p>1 Where is he reading from?</p> <p>2 MR. MAIMON: I'll show him the</p> <p>3 transcript.</p> <p>4 MR. CEDILLO: He just puts it up on the</p> <p>5 screen. I don't know where it comes from.</p> <p>6 THE COURT: You are going to provide</p> <p>7 counsel --</p> <p>8 MR. MAIMON: Of course.</p> <p>9 (End of sidebar.)</p> <p>10 (P-134, Marked for Identification.).</p> <p>11 Q. Dr. Roggli, I'm going to hand you up</p> <p>12 what we marked as Plaintiff's Exhibit 134. And do</p> <p>13 you recognize that as the sworn deposition testimony</p> <p>14 that you gave on January 30th, 1996?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. And this was a case in which you</p> <p>17 appeared as an expert for the plaintiff where the</p> <p>18 claim was that smoking Kent cigarettes caused that</p> <p>19 gentleman's mesothelioma. Correct?</p> <p>20 A. Yes.</p> <p>21 Q. Okay. And turn to page 15.</p> <p>22 A. Fifteen?</p> <p>23 Q. I'm sorry. At the end of 14.</p> <p>24 A. Okay.</p> <p>25 Q. You were asked in that case about the</p>	<p style="text-align: right;">Page 5021</p> <p>1 workplace, that, in my opinion, both will contribute</p> <p>2 to his crocidolite content of his lung, but it would</p> <p>3 not be possible to say the relative contribution</p> <p>4 between the two."</p> <p>5 Did you testify that way?</p> <p>6 A. Yes. In 1996, I believe, which I've</p> <p>7 testified earlier this morning that that was the last</p> <p>8 case I testified for plaintiffs.</p> <p>9 Q. Okay. And that is exactly --</p> <p>10 A. That case.</p> <p>11 MR. MAIMON: Can I have the screen up.</p> <p>12 Q. That is exactly the quote that I have</p> <p>13 there that you gave testimony in 1996. Correct?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. Now, I'd like to move on in your</p> <p>16 report to the testimony that you gave</p> <p>17 about -- withdrawn. I'd like to move on in your</p> <p>18 report to the subject of Mr. Argento's work in the</p> <p>19 Shulton Company. Do you see that?</p> <p>20 A. Yes.</p> <p>21 Q. And that is the second paragraph of your</p> <p>22 October 3, 2013, report. Correct? October 2, I'm</p> <p>23 sorry. No, October 3.</p> <p>24 A. October 3 is the copy I have.</p> <p>25 Q. All right. The second paragraph. Do</p>
<p style="text-align: right;">Page 5020</p> <p>1 first case that you testified about Kent cigarettes</p> <p>2 causing mesothelioma. Do you see that?</p> <p>3 A. Yes.</p> <p>4 Q. And you were asked, "If that person was</p> <p>5 occupationally exposed to crocidolite asbestos or</p> <p>6 worked with products in the workplace that contained</p> <p>7 crocidolite asbestos, then the fact that crocidolite</p> <p>8 asbestos can be demonstrated in his tumor doesn't</p> <p>9 lead you to conclude that it had to have come from</p> <p>10 the cigarette. I mean, I guess what I'm saying is if</p> <p>11 you assume that that person worked with crocidolite</p> <p>12 asbestos products in the workplace, then you can't</p> <p>13 conclude with reasonable certainty that any</p> <p>14 crocidolite in his lung came from the cigarette as</p> <p>15 opposed to the workplace. Isn't that right?"</p> <p>16 Do you see that question?</p> <p>17 A. Yes.</p> <p>18 Q. And your answer was, "Well, I think that</p> <p>19 there's two answers to that. First of all, regarding</p> <p>20 that assumption, I have not been provided any</p> <p>21 information by anybody to corroborate that assumption</p> <p>22 that he was exposed to any crocidolite in the</p> <p>23 workplace. But to answer your question directly, all</p> <p>24 one could say is that if the individual smoked Kent</p> <p>25 cigarettes and was exposed to crocidolite in the</p>	<p style="text-align: right;">Page 5022</p> <p>1 you see that?</p> <p>2 A. Yes, sir.</p> <p>3 Q. Okay. And there you state, "It is my</p> <p>4 understanding that Mr. Argento was employed by</p> <p>5 Shulton Company and American Cyanamid in Clifton, New</p> <p>6 Jersey, from 1955 to 1970 as a machine operator,</p> <p>7 material handler, and mechanic on the production</p> <p>8 floor."</p> <p>9 Did I read that correctly?</p> <p>10 A. Yes.</p> <p>11 Q. You then go on to say, "His job</p> <p>12 responsibilities included working with and working</p> <p>13 around others using asbestos-containing talc."</p> <p>14 Did I read that correctly?</p> <p>15 A. Yes.</p> <p>16 Q. And those were your words, were they</p> <p>17 not?</p> <p>18 A. Well, that's what I was asked to assume.</p> <p>19 Q. It doesn't say that. It says your</p> <p>20 understanding. Correct? "It is my understanding."</p> <p>21 That's what you wrote. Right?</p> <p>22 A. Yes, but usually in the third paragraph</p> <p>23 it says, "assuming this information is correct" then.</p> <p>24 For some reason I don't have that statement "assuming</p> <p>25 information is correct" in this report.</p>

<p style="text-align: right;">Page 5023</p> <p>1 Q. Well, let's see what you wrote in this 2 report. Okay? 3 A. Sure. 4 Q. You say, "It is my understanding" -- 5 that's the first three words of the second paragraph. 6 Right? 7 A. Yes. 8 Q. And then you give the years of Mr. 9 Argento's work at Shulton and his positions. Right? 10 A. Yes. 11 Q. And then you say, "His job 12 responsibilities included working with and 13 around -- working with and working around others 14 using asbestos-containing talc." 15 Did you write that? 16 A. Yes. 17 Q. Okay. And then, if you take a look at 18 the last sentence of your report, you state, do you 19 not, "Exposure to asbestiform tremolite contaminating 20 talc may also have been a contributing factor." 21 Do you see that? 22 A. Yes. 23 Q. Now, to be fair, the sentence before 24 that you address his work at Hoffmann-LaRoche. 25 Right?</p>	<p style="text-align: right;">Page 5025</p> <p>1 Correct? 2 A. Yes. 3 Q. And that's your article. Right? 4 A. It is. 5 Q. Okay. And in that article you talk 6 about cases from your database where commercial 7 amphiboles, amosite or crocidolite, were not found, 8 but tremolite was found in elevated levels. Correct? 9 A. Yes. 10 Q. Okay. And you looked at two possible 11 sources of where that tremolite came from. One was 12 chrysotile and the other was talc. Correct? 13 A. Yes. 14 Q. And you concluded that the tremolite 15 that you found in the lungs of those mesothelioma 16 patients correlated to both coming from chrysotile 17 and also coming from talc. Correct? 18 A. Yes. 19 Q. Okay. Now, you mentioned earlier 20 that -- that tremolite can contaminate chrysotile 21 that comes from Canada. Correct? 22 A. Yes. 23 Q. And it's true, is it not, Dr. Roggli, 24 that when tremolite contaminates chrysotile that 25 comes from Canada, the level of contamination</p>
<p style="text-align: right;">Page 5024</p> <p>1 A. Yes. 2 Q. And you say, "Exposure to asbestos from 3 applying and removing pipe insulation is a 4 well-recognized cause of mesothelioma in the United 5 States." 6 Do you see that? 7 A. Yes. 8 Q. Now, in this report, nowhere in this 9 report do you say that working around or with 10 insulation at Hoffmann-LaRoche caused Mr. Argento's 11 mesothelioma. Correct? 12 A. I probably don't say it directly in this 13 report. That's correct. 14 Q. Okay. And with regard to the talc, you 15 say, "Exposure to asbestiform tremolite-contaminating 16 talc may also have been a contributing factor." 17 Correct? 18 A. Yes. 19 Q. And then you cite to an article titled 20 "Tremolite and Mesothelioma" that you and Drs. 21 Volmer, Butnor and Sporn published in 2002. Correct? 22 A. Yes. 23 (P-135, Marked for Identification.) 24 Q. Okay. This is Plaintiff's Exhibit 135. 25 That is exactly the article that you cite to.</p>	<p style="text-align: right;">Page 5026</p> <p>1 is -- is less than 1 percent. Right? 2 A. It's estimated between a tenth and 1 3 percent, yes. 4 Q. So from .01 to .1. Right? One-tenth of 5 1 percent up to 1 percent, correct, contamination? 6 A. Yes. 7 Q. And despite being at such a low level of 8 contamination, it's your conclusion that that 9 tremolite at levels of one-tenth of 1 percent to 1 10 percent of contamination of chrysotile can cause 11 mesothelioma in patients exposed to those products. 12 Right? 13 A. If they're exposed to a high enough 14 dose, yes. 15 Q. Okay. And the same thing would be true 16 with talc, would it not, that if you have levels of 17 contamination, the same levels of contamination, a 18 very low asbestiform content, that contamination can 19 cause mesothelioma in people exposed to enough of the 20 product. Right? 21 A. It could. And I think we reported one 22 such case. It's Case 10 in Table 3. 23 Q. Okay. 24 Now, one of the things that you talk 25 about when you talk about finding elevated levels of</p>

<p style="text-align: right;">Page 5027</p> <p>1 asbestos in the lung tissues of mesothelioma patients</p> <p>2 is comparing it to controls. Do you recall that?</p> <p>3 A. Yes.</p> <p>4 Q. Okay. And counsel for Lorillard, when</p> <p>5 he asked you questions, talked about control patients</p> <p>6 that are not actual patients, are they? They're not</p> <p>7 patients of yours, are they?</p> <p>8 A. They were individuals who died at the</p> <p>9 Durham VA hospital and were autopsied there.</p> <p>10 Q. Okay. But they're not ongoing people</p> <p>11 that you take lung tissue out of. They're cases that</p> <p>12 you have access to their lung pathology and you use</p> <p>13 that lung pathology as a control group. Right?</p> <p>14 A. Yes.</p> <p>15 Q. You would agree with me, wouldn't you,</p> <p>16 Doctor, that it is important that the control group</p> <p>17 not have people occupationally exposed to asbestos in</p> <p>18 it in order to be an adequate control group?</p> <p>19 A. As much as you can do that, yes.</p> <p>20 Q. Okay. It's true, is it not, that some</p> <p>21 of the cases in your control group, you don't know</p> <p>22 what potential exposures to asbestos they had in the</p> <p>23 past. Correct?</p> <p>24 A. True.</p> <p>25 Q. One of the people who you use as a</p>	<p style="text-align: right;">Page 5029</p> <p>1 A. I have no idea what the level of</p> <p>2 contamination was in that one case we reported.</p> <p>3 Q. Okay. I'm not talking about the one</p> <p>4 case. I'm talking about chrysotile, chrysotile</p> <p>5 contaminated, as far as you know, with tremolite at</p> <p>6 about a tenth to 1 percent. Correct?</p> <p>7 A. Yes.</p> <p>8 Q. And that level of contamination is not</p> <p>9 too small to contribute to somebody's mesothelioma,</p> <p>10 is it?</p> <p>11 A. If they have sufficient doses of</p> <p>12 exposure to chrysotile, that's correct.</p> <p>13 Q. Okay.</p> <p>14 (P-136, Marked for Identification.)</p> <p>15 Q. I'm also going to hand up to you what I</p> <p>16 marked as Plaintiff's Exhibit 136, and this is</p> <p>17 another article that you authored. Correct?</p> <p>18 A. Yes.</p> <p>19 Q. And the title of this article is</p> <p>20 Asbestos-related diseases -- "Asbestos-Related</p> <p>21 Disease Associated With Exposure to Asbestiform</p> <p>22 Tremolite."</p> <p>23 Do you see that?</p> <p>24 A. Yes.</p> <p>25 Q. Okay. And you published this in 1994.</p>
<p style="text-align: right;">Page 5028</p> <p>1 control was a gentleman, unfortunately, who suffered</p> <p>2 from Alzheimer's and wasn't able to give an</p> <p>3 occupational history. Correct?</p> <p>4 A. Correct.</p> <p>5 Q. And to the extent that that person might</p> <p>6 have had a significant occupational exposure to</p> <p>7 asbestos, that would bring your control numbers up.</p> <p>8 Right?</p> <p>9 A. It has a potential to do that, but I</p> <p>10 don't think it did.</p> <p>11 Q. I understand that. And you also have</p> <p>12 someone in your control group who served in the U.S.</p> <p>13 Navy. Correct?</p> <p>14 A. I have to look back at the study. I</p> <p>15 don't recall that one.</p> <p>16 Q. Okay. Let's leave that.</p> <p>17 All right. In any event, you would</p> <p>18 agree with me, would you not, Dr. Roggli, that</p> <p>19 somebody exposed sufficiently to talc contaminated</p> <p>20 with tremolite asbestos could develop a mesothelioma</p> <p>21 as a result of that? Correct?</p> <p>22 A. Yes.</p> <p>23 Q. And that would be at the levels that you</p> <p>24 found applicable for exposure to chrysotile</p> <p>25 contaminated with tremolite. Correct?</p>	<p style="text-align: right;">Page 5030</p> <p>1 Correct?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. And you see on the bottom there's</p> <p>4 an exhibit tab, Roggli 7. Correct?</p> <p>5 A. Yes.</p> <p>6 Q. And that indicates that that was marked</p> <p>7 at one of your depositions. Right?</p> <p>8 A. I think it's been marked at several</p> <p>9 depositions, but this was from one of them, yes.</p> <p>10 Q. Okay. And if we can take a look at</p> <p>11 this, on page 2 -- or at the bottom of page 1, it</p> <p>12 says, "Although tremolite is not mined commercially,</p> <p>13 it is a common contaminant of other mineral deposits,</p> <p>14 such as chrysotile asbestos, vermiculite, and talc."</p> <p>15 Do you see that?</p> <p>16 A. Yes.</p> <p>17 Q. It then goes on to say a sentence later,</p> <p>18 "Additionally, some end products contain these</p> <p>19 minerals, such as cosmetic talc or spackling compound</p> <p>20 which contains chrysotile and may present a potential</p> <p>21 source of tremolite exposure."</p> <p>22 Do you see that?</p> <p>23 A. Yes.</p> <p>24 Q. It was your understanding that Mr.</p> <p>25 Argento was working in a facility at Shulton that was</p>

<p style="text-align: right;">Page 5031</p> <p>1 making cosmetic talc products. Correct?</p> <p>2 A. That's my understanding, yes.</p> <p>3 Q. Okay. Go down to the first full</p> <p>4 paragraph, where it says "Collectively." Do you see</p> <p>5 that?</p> <p>6 A. Yes.</p> <p>7 Q. It says, "Collectively, these studies</p> <p>8 suggest that tremolite asbestos exposure represents a</p> <p>9 potential health risk, not only to miners and</p> <p>10 manufacturers of tremolite-contaminated mineral</p> <p>11 products, but also to those exposed to</p> <p>12 tremolite-contaminated end products." Right?</p> <p>13 A. Yes.</p> <p>14 Q. And that's the same subject that you</p> <p>15 addressed in the 2002 article, "Tremolite and</p> <p>16 Mesothelioma," that the tremolite asbestos coming</p> <p>17 from the end products, whether they be chrysotile or</p> <p>18 talc can cause mesothelioma. Correct?</p> <p>19 A. Yes.</p> <p>20 Q. Turn to page 817 of the article. The</p> <p>21 second full paragraph that starts "Women."</p> <p>22 Do you see that?</p> <p>23 A. 817?</p> <p>24 Q. 817.</p> <p>25 A. Okay.</p>	<p style="text-align: right;">Page 5033</p> <p>1 A. Yes.</p> <p>2 Q. And, in fact, it's true, is it not, Dr.</p> <p>3 Roggli, that you have written urging doctors not to</p> <p>4 use talc for pleurodesis -- for a pleurodesis in</p> <p>5 patients with nonmalignant pleural effusions. Right?</p> <p>6 A. Correct.</p> <p>7 (P-137, Marked for Identification.)</p> <p>8 Q. And 137, Plaintiff's P-137 is exactly</p> <p>9 that letter to the editor that you wrote. Correct?</p> <p>10 A. Yes.</p> <p>11 Q. You wrote it together with Dr. Andrew</p> <p>12 Ghio, is it?</p> <p>13 A. Yes.</p> <p>14 Q. From the United States Environmental</p> <p>15 Protection Agency. Correct?</p> <p>16 A. Correct.</p> <p>17 Q. And you urged here that talc should not</p> <p>18 be used for pleurodesis in patients with nonmalignant</p> <p>19 pleural effusions. Do you see that?</p> <p>20 A. Yes.</p> <p>21 Q. And you'll agree I put a good picture of</p> <p>22 you on the screen there?</p> <p>23 A. It's not bad.</p> <p>24 Q. Not bad. Okay. And you say that on the</p> <p>25 bottom of the left-hand side, "Talc is not a uniform</p>
<p style="text-align: right;">Page 5032</p> <p>1 Q. Are you there?</p> <p>2 A. Yes.</p> <p>3 Q. It says, "Women represent 43 percent, 3</p> <p>4 out of 7, of the cases in this study versus only 8</p> <p>5 percent of the 153 mesothelioma cases with tissue</p> <p>6 asbestos analysis in one of the author's consultation</p> <p>7 files."</p> <p>8 Do you see that?</p> <p>9 A. Yes.</p> <p>10 Q. And that gives "VLR." That's Victor</p> <p>11 L. Roggli. Right?</p> <p>12 A. Yes.</p> <p>13 Q. Okay. It says, "A potential source of</p> <p>14 exposure for these three cases was cosmetic talc</p> <p>15 which may be contaminated with tremolite asbestos."</p> <p>16 Did I read that correctly?</p> <p>17 A. Yes.</p> <p>18 Q. And then at the bottom sentence of</p> <p>19 the -- of the page says, "Furthermore, the finding of</p> <p>20 relatively modest elevations of tremolite content in</p> <p>21 some of our mesothelioma cases suggests to us that at</p> <p>22 least for some susceptible individuals moderate</p> <p>23 exposures to tremolite-contaminated dust can produce</p> <p>24 malignant pleural mesothelioma."</p> <p>25 Did I read that correctly?</p>	<p style="text-align: right;">Page 5034</p> <p>1 substance and varies significantly in size and</p> <p>2 chemical composition with the latter depending on</p> <p>3 geologic origin."</p> <p>4 Do you see that?</p> <p>5 A. Yes.</p> <p>6 Q. You go on to say, "This sheet silicate</p> <p>7 can be contaminated by asbestos." Correct?</p> <p>8 A. Yes.</p> <p>9 Q. "And an association between</p> <p>10 carcinogenesis and exposure to asbestos included in</p> <p>11 talc appears credible."</p> <p>12 Do you see that?</p> <p>13 A. Yes.</p> <p>14 Q. Okay. And, in fact, later on in this</p> <p>15 letter to the editor you indicate here that even if a</p> <p>16 product is, quote unquote, asbestos free, it still</p> <p>17 shouldn't be used to put in people's bodies because</p> <p>18 the mechanism of cancer induced by asbestos is</p> <p>19 similarly pertinent to talc.</p> <p>20 Correct?</p> <p>21 A. Yes.</p> <p>22 Q. And it's true, is it not, that in</p> <p>23 addition to asbestos causing pleural plaques, talc</p> <p>24 can cause pleural plaques.</p> <p>25 A. Well, in that regard we talk about that</p>

<p style="text-align: right;">Page 5035</p> <p>1 in Chapter 6 of my textbook, that some of the first 2 cases of pleural plaques were found in talc miners, 3 but we believe that was from contaminated tremolite. 4 Q. Okay. Good enough. 5 Now, again, if -- and let's go back to 6 your report in this case. The information that you 7 had when you wrote your report, you had -- withdrawn. 8 The information that you had about Mr. Argento's work 9 at Shulton is contained in your report. Correct? 10 A. Yes. 11 Q. And you accepted exposure to asbestiform 12 tremolite contaminating talc as a potential 13 contributing factor to his mesothelioma. Correct? 14 A. For the purposes of this report and 15 assuming that it was correct that the talc he was 16 exposed to was contaminated by asbestos, then yes. 17 Q. And that is what you stated your 18 understanding was at the time. Correct? 19 A. Yes. 20 Q. Okay. And if it was contaminated with 21 asbestos, that talc that he was working with on the 22 levels that you published upon in "Tremolite and 23 Mesothelioma" and he was exposed to it as he 24 described, then it would be your opinion, more likely 25 than not, that that was a contributing factor to his</p>	<p style="text-align: right;">Page 5037</p> <p>1 cross-examination. He was called as the expert for 2 the defense by Lorillard and H&V to discuss the 3 causation in this case. He mentioned one product 4 that he says that he believes was a cause. He 5 mentioned one that he believes wasn't a cause. And 6 he said, "I don't have enough information. I don't 7 have any information about the others." 8 We now know that he really does. He said 9 it in his report. And so if the information that he 10 had is correct, then that was also a contributing 11 cause and that is perfectly appropriate 12 cross-examination. 13 The issue was raised by counsel for 14 Lorillard on direct examination. And even if it 15 wasn't, your Honor, I've been sitting at counsel 16 table many a times when a defendant wants to go 17 through all of Dr. Moline's causation opinions with 18 regard to every product. And it's in her report, and 19 it's in his report, and it may -- so that means there 20 are circumstances in which it would be and 21 circumstances where it might not be, and that's what 22 I'm exploring with him. 23 MR. DUNST: Your Honor, there's a 24 significant difference in Dr. Moline's report. 25 Dr. Moline indicated that those were, in fact,</p>
<p style="text-align: right;">Page 5036</p> <p>1 mesothelioma. 2 MR. DUNST: Objection, your Honor. 3 THE COURT: Don't answer. Sidebar. 4 (At sidebar.) 5 MR. DUNST: Your Honor, this goes back 6 to my initial objection. My initial objection is 7 that nowhere in Dr. Roggli's report does he indicate 8 that based upon a reasonable degree of medical 9 probability that my talc was a substantial 10 contributing factor to the mesothelioma. He doesn't 11 say it in his report. He didn't say it in the one 12 question that was asked by Mr. Cedillo. To now be 13 able to go into this when it's not disclosed in the 14 report ever, I think it's inappropriate. 15 And this is the reason I objected before 16 because I knew that we were going to get to this 17 point, and I don't think any of this should have been 18 permitted for the reasons I've indicated. Because I 19 know that we're going in this direction. He never 20 said that it was a substantial contributing factor. 21 He said it "may." That's like a possibility. It 22 shouldn't have been allowed, and this shouldn't be 23 allowed, either. 24 THE COURT: Thank you. 25 MR. MAIMON: I think this is appropriate</p>	<p style="text-align: right;">Page 5038</p> <p>1 substantial contributing factors. She said they were 2 substantial contributing factors based upon a 3 reasonable degree of medical certainty. 4 Nowhere did Dr. Roggli ever say that in 5 the report. It has not been disclosed. And for 6 Mr. Maimon to be able to go into it now I think is 7 inappropriate because it's not been disclosed in his 8 report. 9 If this was all -- if what is contained 10 in the report is all that Dr. Roggli said, that would 11 not be permitted to come in if Mr. Cedillo wanted to 12 put it in because I would have objected to it at that 13 point because it's not based upon probabilities. He 14 says it "may." Anything may. Anything is possible. 15 That's not sufficient under the standards of New 16 Jersey law. 17 Now -- now Mr. Maimon is trying to do the 18 same thing which couldn't be done if Mr. Cedillo 19 tried to do it because it's not -- it's not 20 adequately worded. It doesn't go to the standard 21 that we have in New Jersey. And -- and I think it's 22 important to stress the difference between 23 Dr. Moline, because Dr. Moline in her report, she did 24 say that each of those were substantial contributing 25 factors, and she said that that was based upon</p>

Roggli - cross

<p style="text-align: right;">Page 5039</p> <p>1 reasonable medical probability. There's a big 2 difference. 3 And we're now getting to the point, which 4 is why I objected before because I knew that we were 5 going to get here, and none of this should be 6 permitted. 7 THE COURT: Thank you. 8 As I indicated previously, The Court's 9 ruling, this did come up by way of direct, and the 10 cross-examination goes into that, as well as issues 11 of credibility. So I'm still allowing it, and you 12 can cross-examine on it. Thank you. 13 (End of sidebar.) 14 THE COURT: You can answer that 15 question. The objection is overruled. 16 Q. You don't remember the question, do you? 17 A. No, if you could repeat it or read it 18 back. 19 Q. Okay. Let me try it again. 20 If the talc that Mr. Argento was working 21 with and around in Shulton was, as your understanding 22 was in your report, contaminated with asbestos, and 23 if it was contaminated with asbestos at a level that 24 you assumed in your "Tremolite and Mesothelioma" 25 article that chrysotile can be contaminated with</p>	<p style="text-align: right;">Page 5041</p> <p>1 chrysotile and cause mesothelioma, then that 2 was -- would have been, more likely than not, a 3 significant contributing cause of his mesothelioma. 4 Correct? 5 A. Yeah. Typically, I would add to that, 6 and would result in a level of tremolite in the lungs 7 above background since that's what my reports that 8 we're talking about have focused upon, it would be, 9 yes. 10 Q. All right. And as we said, when the 11 surgeons operated on Mr. Argento, they didn't take 12 lung tissue. Correct? 13 A. Correct. 14 Q. Okay. And taking lung tissue was not 15 necessary or important for his care and treatment, 16 was it? 17 A. That's my understanding. 18 Q. Okay. And so that there was no reason 19 from a medical point of view to take any lung tissue 20 from Mr. Argento. Correct? 21 A. Not that I'm aware of. 22 Q. Okay. 23 Let's talk about Kent cigarettes. 24 You testified at trial once that a 25 gentleman's mesothelioma was caused by his smoking of</p>
<p style="text-align: right;">Page 5040</p> <p>1 tremolite and cause mesothelioma, then that, on a 2 more-likely-than-not basis, would have significantly 3 contributed to his mesothelioma. Correct? 4 A. I thought you were going to ask would be 5 a potential exposure, which I would have said yes; 6 but when you said now more likely than not, I'm 7 trying to think if I have enough information to say 8 so, because I haven't really been asked to look 9 closely at his talc exposures. 10 Q. Well, take a look at the last quote on 11 the screen: "Exposure to asbestiform tremolite 12 containing talc may also have been a contributing 13 factor." 14 A. Yes, I agree with that. 15 Q. You acknowledge that you don't even have 16 to think about it being a potential exposure. Right? 17 A. Right. 18 Q. Because you put that in your report. 19 Right? 20 A. Right. 21 Q. And if he was exposed in the way that he 22 described that you talked about in your report and 23 that you reviewed in his deposition, and if the level 24 of contamination was on the level of contamination 25 that you have found tremolite asbestos to contaminate</p>	<p style="text-align: right;">Page 5042</p> <p>1 Kent cigarettes. Correct? 2 A. The last time I testified to that was in 3 1996 or 1997, yes. 4 Q. At trial. Correct? 5 A. Yes. 6 Q. And that was the case of Mr. Roth. 7 Correct? 8 A. No. That was the case of Mr. Lesnick in 9 Philadelphia was the last one. Roth was prior to 10 Lesnick. 11 Q. Okay. So the first trial was Mr. Roth. 12 Right? 13 A. Yes. 14 Q. Okay. And it's true, is it not, that at 15 that time you listed six reasons why you believe that 16 his mesothelioma was caused by his smoking of Kent 17 cigarettes. And I've listed those on the board. 18 Right? 19 A. Yes. 20 Q. Okay. So some of these you spoke about 21 with Mr. Cedillo, but I'd like to talk about all of 22 them. 23 The first is the diagnostic findings of 24 mesothelioma. Correct? 25 A. Yes.</p>

<p style="text-align: right;">Page 5043</p> <p>1 Q. And then pleural plaque formation. 2 Right? 3 A. Yes. 4 Q. And then amphiboles found on tissue 5 analysis. Correct? 6 A. Yes. 7 MR. CEDILLO: Your Honor, can we 8 approach? 9 THE COURT: Sure. 10 (At sidebar.) 11 MR. CEDILLO: Number 6, your Honor, is 12 the Talcott study. 13 THE COURT: I didn't even read that far. 14 MR. CEDILLO: Yeah, that's why I 15 objected before we got there. You've ruled that the 16 Talcott is out, and I certainly didn't go into any of 17 that. I stayed away from the things that are out so 18 that I wouldn't be opening them up here, and now he's 19 going into them. 20 MR. MAIMON: Well, I absolutely intend 21 on going into it. 22 THE COURT: What did you say? You 23 absolutely intend? 24 MR. MAIMON: Intend on going into it. 25 THE COURT: After I ruled it out?</p>	<p style="text-align: right;">Page 5045</p> <p>1 an important factor in his opinion about the ability 2 to cause mesothelioma. 3 In fact, he has said, and I have his 4 testimony, that when you have mesothelioma in a 5 manufacturing setting, exposure to that product, 6 assuming that there's respirable asbestos, he accepts 7 that that is a cause -- that that is supportive of 8 his opinion that that product causes mesothelioma. 9 THE COURT: Because we are not in a 10 manufacturing setting, is why it's not in this case. 11 So take number six out. I didn't let them get into 12 it. I mean, we've already had this motion. 13 MR. MAIMON: The other aspect of it, 14 your Honor, is as follows: He testified on direct 15 examination that crocidolite is more potent than 16 other forms of asbestos. He uses the Talcott study 17 and the other information to say that the crocidolite 18 asbestos that went into the Lorillard cigarettes was 19 the most -- even more potent than regular crocidolite 20 asbestos, and he uses all these statistics. So I 21 think that it's absolutely important and vital that 22 we be able to explore this witness' testimony. It's 23 not only regular crocidolite, but the crocidolite 24 that went into their product according to Dr. Roggli 25 is even more potent based on that data.</p>
<p style="text-align: right;">Page 5044</p> <p>1 MR. MAIMON: No. Because I want your 2 Honor to hear his testimony about it. And then I 3 think that your Honor will hear that this expert has 4 testified in the past under oath, and he's testified 5 since he's been working for Kent that his opinions 6 haven't changed in this regard, and your Honor didn't 7 hear that his opinions changed in this regard. 8 THE COURT: Why didn't you bring it out 9 when we argued the motion on Talcott? 10 So his testimony for plaintiffs on Kent 11 cigarettes was in 1997. The issue of the Talcott 12 studies was out there. He has said that he testified 13 since consistently now for the defendant. Why didn't 14 you bring that out when we argued the Talcott motion? 15 MR. MAIMON: I think I did, and it was a 16 different issue with regard to talc. It was an issue 17 about whether or not we could argue that -- about the 18 Talcott study for purposes of opening statements 19 about whether or not the H&V -- let me make my 20 proffer, your Honor. 21 This expert has testified both for 22 plaintiffs, but then when he's testified for 23 Lorillard and Kent he hasn't changed his opinion on 24 the significance of it. That the -- that the 25 mesothelioma experienced in both H&V and Lorillard is</p>	<p style="text-align: right;">Page 5046</p> <p>1 And if I'm not able to explore his 2 opinions on that, your Honor, how can I adequately 3 argue to the jury what the basis of that, you know, 4 changing this assumption here versus that assumption 5 there is important when I'm not able to explore all 6 of the bases for his opinion, especially ones that 7 haven't changed? His opinion up through a year or 8 two ago when he made a presentation -- I have a slide 9 on this -- his presentation about the experience in 10 the filter setting shows that this crocidolite is 11 more potent than any other. 12 MR. CEDILLO: For a factory worker 13 working with the product in the manufacturing stage. 14 Mr. Argento didn't ever do any of that, your Honor. 15 That's all the same reasons why it got taken out. 16 And I mean -- and your Honor, I mean, I object to the 17 way that this is being done. 18 THE COURT: So do I. 19 MR. CEDILLO: I certainly wanted you to 20 hear that the reason he thinks Longo is junk science 21 is because he knows that he published -- I'm 22 sorry -- that he conducted testing that got 1/20th of 23 the result that he published. 24 THE COURT: Um-hum, yeah. 25 MR. CEDILLO: And he had it and he chose</p>

<p style="text-align: right;">Page 5047</p> <p>1 not to put it in there.</p> <p>2 THE COURT: I understand.</p> <p>3 MR. CEDILLO: And I certainly would want</p> <p>4 that to be heard.</p> <p>5 THE COURT: Thank you.</p> <p>6 Anything further?</p> <p>7 MR. MAIMON: Yes, your Honor.</p> <p>8 He testified on direct examination that</p> <p>9 there were maybe three bases for his opinion about</p> <p>10 Kents when he was pro plaintiff. That's not true.</p> <p>11 There's a lot more. And it wasn't a factor for him</p> <p>12 to say that the potency of this crocidolite was</p> <p>13 because it was in the manufacturing setting. He</p> <p>14 believes that this particular type of crocidolite is</p> <p>15 more potent than normal crocidolite. It has nothing</p> <p>16 to do with whether it's in a manufacturing facility.</p> <p>17 THE COURT: Okay. All right. I'm ready</p> <p>18 to rule.</p> <p>19 So I previously heard a motion with</p> <p>20 regard to the Talcott studies. At that point in time</p> <p>21 I ruled that we are not going to get into it because</p> <p>22 it dealt with exposure in the workplace.</p> <p>23 Having ruled that, you had the</p> <p>24 information then with regard to the entirety of his</p> <p>25 testimony since switching sides on the Kent issue</p>	<p style="text-align: right;">Page 5049</p> <p>1 A. Yes.</p> <p>2 Q. And it was important to you and a basis</p> <p>3 for your opinion that Kent contained crocidolite when</p> <p>4 Mr. Roth smoked them. Correct?</p> <p>5 A. Yes.</p> <p>6 Q. And it was also important to you that</p> <p>7 scientific studies showed crocidolite released from</p> <p>8 Kents during smoking. Correct?</p> <p>9 A. Yes.</p> <p>10 Q. Okay. Now, with regard to Mr. Argento,</p> <p>11 it's true, is it not, that you confirmed the</p> <p>12 diagnosis of mesothelioma? Correct?</p> <p>13 A. Yes.</p> <p>14 Q. It's true, is it not, that Mr. Argento</p> <p>15 had pleural plaque formation? Correct?</p> <p>16 A. Yes.</p> <p>17 Q. And nobody looked for any amphiboles in</p> <p>18 his tissue. Correct?</p> <p>19 A. Yes, no analysis was done.</p> <p>20 Q. Okay. Now, the tissue that was looked</p> <p>21 at in the Roth case was not lung tissue like you've</p> <p>22 been talking to this jury about, but it was his</p> <p>23 pleural tumor tissue. Correct?</p> <p>24 A. Yes.</p> <p>25 Q. Okay. And you found it significant that</p>
<p style="text-align: right;">Page 5048</p> <p>1 from the plaintiff to the defense. Now while he's on</p> <p>2 the witness stand, putting up a slide, frankly, is</p> <p>3 inappropriate. I should have been put on notice.</p> <p>4 Certainly, counsel should have been put on notice.</p> <p>5 This is not the time. So take number six out or take</p> <p>6 the entire slide down.</p> <p>7 MR. MAIMON: Okay. Could I have just a</p> <p>8 couple minutes to do that, Judge?</p> <p>9 THE COURT: Sure.</p> <p>10 (End of sidebar.)</p> <p>11 MR. MAIMON: May I, your Honor?</p> <p>12 THE COURT: Yes.</p> <p>13 MR. MAIMON: Thank you.</p> <p>14 THE COURT: Put it back on.</p> <p>15 Q. Okay. Dr. Roggli, in the Roth case you</p> <p>16 testified that you confirmed the diagnosis of</p> <p>17 mesothelioma. Correct?</p> <p>18 A. Yes.</p> <p>19 Q. It was also important to you that there</p> <p>20 was pleural plaques formation in the Roth case.</p> <p>21 Correct?</p> <p>22 A. Yes.</p> <p>23 Q. It was also important to you that the</p> <p>24 analysis had been done on some of Mr. Roth's biopsy</p> <p>25 tissue and found amphiboles. Correct?</p>	<p style="text-align: right;">Page 5050</p> <p>1 there was crocidolite asbestos found in his tumor</p> <p>2 tissue, did you not?</p> <p>3 A. Yeah. I'm not sure whether it was tumor</p> <p>4 tissue or just pleural tissue, but I think it was Dr.</p> <p>5 Longo's lab that did the analysis and I assumed that</p> <p>6 it was correct.</p> <p>7 Q. And you relied on that. Correct?</p> <p>8 A. Yes.</p> <p>9 Q. We'll talk about Dr. Longo in a bit.</p> <p>10 You, yourself, have analyzed pleural tissue in</p> <p>11 mesothelioma patients in the past. Correct?</p> <p>12 A. Well, one occasion I think I was asked</p> <p>13 to do so by a physician.</p> <p>14 Q. David Kern. Does that ring a bell?</p> <p>15 A. Yeah, I think it was Dr. Kern. And we</p> <p>16 did it because we were asked to do so, and we</p> <p>17 determined it was not -- I could not determine it</p> <p>18 was.</p> <p>19 Q. And you found asbestos in the pleural</p> <p>20 tissue that you looked at. Correct?</p> <p>21 A. Yes.</p> <p>22 Q. You found chrysotile asbestos in the</p> <p>23 tissue that you looked at. Right?</p> <p>24 A. Yes.</p> <p>25 Q. You could have looked at Mr. Argento's</p>

<p style="text-align: right;">Page 5051</p> <p>1 pleural tissue. Correct?</p> <p>2 A. I could have.</p> <p>3 Q. Now, you assumed in your -- withdrawn.</p> <p>4 Back to your report. The second paragraph. Are you</p> <p>5 there? The last sentence.</p> <p>6 A. Yes.</p> <p>7 Q. It says, "Finally, Mr. Argento claims to</p> <p>8 have smoked Kent cigarettes with the Micronite filter</p> <p>9 at the rate of at least a pack and a half per day</p> <p>10 from 1953 to 1956." Do you see that?</p> <p>11 A. Yes.</p> <p>12 Q. And that would be at a time when those</p> <p>13 filters contain asbestos. Correct?</p> <p>14 A. Yes.</p> <p>15 Q. And you are aware, are you not, of</p> <p>16 scientific studies showing the release of crocidolite</p> <p>17 from Kents during smoking? Correct?</p> <p>18 A. Yes.</p> <p>19 Q. Okay. Now, you mentioned that this was</p> <p>20 in the Roth case and that there was a subsequent case</p> <p>21 to Roth. It was called Lesnick. Right?</p> <p>22 A. Lesnick. Yes.</p> <p>23 Q. And you have the transcript of your</p> <p>24 deposition in front of you. Right?</p> <p>25 A. Do I? Yes.</p>	<p style="text-align: right;">Page 5053</p> <p>1 the most potent form of asbestos in causing</p> <p>2 mesothelioma. Correct?</p> <p>3 A. Most potent, yes.</p> <p>4 Q. Okay. And there are different types of</p> <p>5 crocidolite from different parts of the world.</p> <p>6 Correct?</p> <p>7 A. Yes.</p> <p>8 Q. And is it your opinion that the</p> <p>9 crocidolite that was used in the Kent cigarettes was</p> <p>10 a particularly potent type of crocidolite?</p> <p>11 A. I think so.</p> <p>12 Q. Okay. So that on the -- on the grades</p> <p>13 of crocidolite, there are some that are more potent</p> <p>14 and some that are less potent, even within</p> <p>15 crocidolite, itself. Right?</p> <p>16 A. Yes.</p> <p>17 Q. And it's your opinion that the</p> <p>18 crocidolite used in Kent cigarettes was a</p> <p>19 particularly potent type of crocidolite. Correct?</p> <p>20 A. Yes.</p> <p>21 Q. And you're aware, are you not, that one</p> <p>22 of the reasons that the crocidolite asbestos was put</p> <p>23 into the Kent cigarette filters was because of the</p> <p>24 thinness of it? Were you aware of that?</p> <p>25 A. I was aware because of its</p>
<p style="text-align: right;">Page 5052</p> <p>1 Q. And look at pages 7 through 10. Do you</p> <p>2 there describe the reasons why you believe that</p> <p>3 Mr. Lesnick's mesothelioma was caused by him smoking</p> <p>4 Kent cigarettes?</p> <p>5 A. Yes.</p> <p>6 Q. You mention there that crocidolite is</p> <p>7 the most potent form of asbestos in causing</p> <p>8 mesothelioma. Correct?</p> <p>9 A. Yes.</p> <p>10 Q. One of the things that is important is</p> <p>11 the thinness of the fiber. Correct?</p> <p>12 A. That's part of it. It's the overall</p> <p>13 aspect ratio and durability that's important.</p> <p>14 Q. Okay. And crocidolite is -- when you</p> <p>15 say aspect ratio, you mean how long it is comparing</p> <p>16 to how thin it is. Right?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. And crocidolite asbestos is a</p> <p>19 long, thin fiber. Correct?</p> <p>20 A. Typically, yes.</p> <p>21 Q. Okay. Sometimes it can be so thin that</p> <p>22 it can escape detection in the microscope that you</p> <p>23 use in your laboratory. Correct?</p> <p>24 A. Sometimes.</p> <p>25 Q. Okay. And when you -- so crocidolite is</p>	<p style="text-align: right;">Page 5054</p> <p>1 absorbability, its ability to absorb to its surface</p> <p>2 and makes it more act as a filtering agent.</p> <p>3 Q. If Lorillard put up an expert that said</p> <p>4 that it was the very, very thinness of those fibers</p> <p>5 that made it a good filtering material, you'd accept</p> <p>6 that, wouldn't you?</p> <p>7 A. I have no reason to disagree with it.</p> <p>8 Q. Okay. And you testified at that time</p> <p>9 that there were scientific studies that have</p> <p>10 demonstrated the release of fibers from smoking Kent</p> <p>11 cigarettes. Correct?</p> <p>12 A. Yes.</p> <p>13 Q. And in that case you made an estimate,</p> <p>14 like you told the jury earlier, about the amount of</p> <p>15 crocidolite asbestos that would be in the lung tissue</p> <p>16 of a Kent smoker. Correct?</p> <p>17 A. Yes.</p> <p>18 Q. And you talked about in that case animal</p> <p>19 studies demonstrating the propensity of crocidolite</p> <p>20 to reach the pleura. Correct?</p> <p>21 A. Yes.</p> <p>22 Q. And you also talked about having relied</p> <p>23 on the identification of crocidolite fibers in tissue</p> <p>24 samples of Kent smokers with mesothelioma. Correct?</p> <p>25 A. Where is that?</p>

<p style="text-align: right;">Page 5055</p> <p>1 Q. Page 9, lines 10 through 15.</p> <p>2 A. Okay.</p> <p>3 Q. You see that?</p> <p>4 A. Yes.</p> <p>5 Q. Okay. And you also relied on the fact</p> <p>6 that in your opinion the background or ambient level</p> <p>7 of crocidolite in the air is zero. Right?</p> <p>8 A. Essentially, yes.</p> <p>9 Q. Okay. And then your own -- you relied</p> <p>10 on your own semiquantitative epidemiologic study of</p> <p>11 women with mesothelioma related to the percentage of</p> <p>12 women with mesothelioma who smoked Kents compared to</p> <p>13 Kent's market share for the relative years. Correct?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. So I've put on the board all of</p> <p>16 those that we just talked about. Right?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. Let's talk about them one by one.</p> <p>19 Crocidolite is the most potent form of</p> <p>20 asbestos in causing mesothelioma. Right?</p> <p>21 A. Yes.</p> <p>22 Q. And when you have talked about that in</p> <p>23 the past, you referred to the Hodgson and Darnton</p> <p>24 article which says that crocidolite is 500 times more</p> <p>25 potent than chrysotile. Correct?</p>	<p style="text-align: right;">Page 5057</p> <p>1 lower and some higher. Right?</p> <p>2 A. Yes.</p> <p>3 Q. And the crocidolite in the Kents, how</p> <p>4 much more potent relative to chrysotile would they</p> <p>5 be?</p> <p>6 A. I would use the 500 times potency number</p> <p>7 for that.</p> <p>8 Q. Okay. Now, scientific studies</p> <p>9 demonstrating the release of fibers from smoking</p> <p>10 Kents. Do you see that?</p> <p>11 A. Yes.</p> <p>12 Q. And at that time you relied on various</p> <p>13 studies that had been done, the Fullam studies, the</p> <p>14 Revere studies, something you called the OCF test,</p> <p>15 the Pauley article, and the Longo article. Right?</p> <p>16 A. Yes.</p> <p>17 MR. CEDILLO: Your Honor, I'm going to</p> <p>18 object. The only thing I covered -- sorry.</p> <p>19 THE COURT: Sidebar.</p> <p>20 (At sidebar.)</p> <p>21 MR. CEDILLO: Your Honor, it exceeds the</p> <p>22 scope, except for Longo. I didn't ask him about any</p> <p>23 of the others. I could have. I did it on purpose</p> <p>24 because I wanted to cut it down completely. It</p> <p>25 exceeds the scope.</p>
<p style="text-align: right;">Page 5056</p> <p>1 A. Yes.</p> <p>2 Q. And Berman and Crump, who you talked</p> <p>3 about earlier, have given estimates that crocidolite</p> <p>4 may be a thousand times more potent than chrysotile.</p> <p>5 Correct?</p> <p>6 A. Yeah, I think that their numbers are 700</p> <p>7 to 800 times, yes.</p> <p>8 Q. Okay. We'll fix that.</p> <p>9 The crocidolite that was used in the</p> <p>10 Kent cigarettes, would those be more towards the 7 or</p> <p>11 800 times or would those be more towards the 500</p> <p>12 times?</p> <p>13 A. Well, I don't think you can use the 7 or</p> <p>14 800 times from Berman and Crump because they're based</p> <p>15 on electron microscopy and based on fibers that are</p> <p>16 10 microns or greater in length. And so there's no</p> <p>17 data on that.</p> <p>18 So what we have is basically the Hodgson</p> <p>19 and Darnton phase contrast microscopy, so that's what</p> <p>20 we have to rely upon.</p> <p>21 Q. Okay. So that dealt with a whole host</p> <p>22 of people exposed to crocidolite asbestos and given</p> <p>23 an average of relative potency. Correct?</p> <p>24 A. Yes.</p> <p>25 Q. Okay. So that average would have some</p>	<p style="text-align: right;">Page 5058</p> <p>1 MR. MAIMON: The scope of</p> <p>2 cross-examination is in the subject area. The fact</p> <p>3 that he chose not to talk about tests that showed the</p> <p>4 release of asbestos fibers that this expert has</p> <p>5 relied upon in the past was his choice. It doesn't</p> <p>6 limit me from going into the fact that he has</p> <p>7 testified in the past that they were reliable and on</p> <p>8 the basis of him saying that asbestos can cause</p> <p>9 mesothelioma.</p> <p>10 MR. CEDILLO: I will redirect him on</p> <p>11 those topics. Okay?</p> <p>12 THE COURT: Absolutely.</p> <p>13 MR. CEDILLO: Okay.</p> <p>14 THE COURT: All right. Let's continue.</p> <p>15 After you finish this slide, we're going</p> <p>16 to take the break.</p> <p>17 MR. MAIMON: Do you want to take it now?</p> <p>18 Because this subject area will take a little bit.</p> <p>19 THE COURT: Okay. That's fine.</p> <p>20 (End of sidebar.)</p> <p>21 THE COURT: Members of the jury, we're</p> <p>22 going to take our 15-minute break now so I don't</p> <p>23 interrupt this line of testimony later on.</p> <p>24 So remember to leave your notebooks here.</p> <p>25 Wear your juror badges. Remember my instructions. A</p>

<p style="text-align: right;">Page 5059</p> <p>1 member of my staff will be down shortly before 3:30</p> <p>2 to pick you up.</p> <p>3 (The jury leaves the courtroom.)</p> <p>4 THE COURT: And we are off the record.</p> <p>5 (A recess is taken.)</p> <p>6 (The jury enters the courtroom. The</p> <p>7 following takes place in the presence of the jury.)</p> <p>8 THE COURT: Please be seated. Make sure</p> <p>9 your cell phones are shut off.</p> <p>10 Mr. Maimon, you may continue. Get the</p> <p>11 screen back up.</p> <p>12 MR. MAIMON: Thank you.</p> <p>13 Q. Doctor, we are at number 3 with regard</p> <p>14 to scientific studies that you testified in the</p> <p>15 Lesnick case had demonstrated release of fibers from</p> <p>16 smoking Kents. Do you recall that?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. And the first mention up there is</p> <p>19 the Fullam studies. Do you recall those?</p> <p>20 A. Yes.</p> <p>21 Q. And, in fact, in 1996 and 1997, when you</p> <p>22 were testifying that Kents caused mesothelioma, you</p> <p>23 were aware of those studies, were you not?</p> <p>24 A. Yes.</p> <p>25 Q. Okay. And one of the things that you</p>	<p style="text-align: right;">Page 5061</p> <p>1 fibers aren't packed all that tight into the filter</p> <p>2 which means that fibers might be released if you</p> <p>3 smoke the cigarettes which you would have to</p> <p>4 demonstrate such as the case that was done by Fullam,</p> <p>5 Revere, and Dr. Longo's laboratory. Do you recall</p> <p>6 giving that testimony?</p> <p>7 A. Yes.</p> <p>8 Q. In addition, there was the article by</p> <p>9 Dr. Pauley. Dr. Cummings was here earlier in the</p> <p>10 trial and he gave some testimony about that. But</p> <p>11 that was study that you had reviewed, a published</p> <p>12 study, that showed that filtered cigarettes are</p> <p>13 capable of disintegrating during smoking and</p> <p>14 releasing fibers of various types. Do you recall</p> <p>15 that?</p> <p>16 A. Yes.</p> <p>17 Q. And you relied on that in those cases.</p> <p>18 Correct?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. And it was your testimony at that</p> <p>21 time, wasn't it, that you can't look at -- even</p> <p>22 though Pauley wasn't looking at Kent cigarettes or</p> <p>23 cigarettes that had asbestos filters, you can't look</p> <p>24 at Pauley in isolation, that you have to look at</p> <p>25 Fullam, you have to look at Revere, and you have to</p>
<p style="text-align: right;">Page 5060</p> <p>1 had actually seen is you had actually seen the</p> <p>2 photomicrographs of the crocidolite fibers that were</p> <p>3 released from the Kent cigarettes taken in</p> <p>4 Dr. Fullam's laboratory. Correct?</p> <p>5 A. The electron micrographs.</p> <p>6 Q. The electron micrographs.</p> <p>7 And you relied on that finding as part</p> <p>8 of the bases for your opinion at the time. Correct?</p> <p>9 A. Yes.</p> <p>10 Q. And you saw large numbers of electron</p> <p>11 micrographs with those fibers. Correct?</p> <p>12 A. There were several, yes.</p> <p>13 Q. Okay. You also made reference at that</p> <p>14 time to the studies of Althea Revere which showed</p> <p>15 asbestos released from smoking Kent cigarettes.</p> <p>16 Correct?</p> <p>17 A. Maybe. I don't recall that.</p> <p>18 Q. Okay. There's something -- they are</p> <p>19 called OCF. Do you see that?</p> <p>20 A. Yes.</p> <p>21 Q. And at that time you relied on a test</p> <p>22 that had been done where the filter of a Kent</p> <p>23 cigarette or a Kent cigarette was tapped on some</p> <p>24 glass, and crocidolite fibers were released; and it</p> <p>25 was your opinion that what that tells you is that the</p>	<p style="text-align: right;">Page 5062</p> <p>1 look at the OCF study, and you have to look at what</p> <p>2 Dr. Longo did. Correct?</p> <p>3 A. Yes.</p> <p>4 Q. Okay. And then you also take into</p> <p>5 consideration Dr. Longo's published article in 1995</p> <p>6 in Cancer Research titled, "Crocidolite Asbestos</p> <p>7 Fibers in Smoke From Original Kent Cigarettes." And</p> <p>8 you have that up there with you. Correct?</p> <p>9 A. Yes.</p> <p>10 Q. Okay. If you can get that out.</p> <p>11 You know Dr. Longo. Correct?</p> <p>12 A. Yes.</p> <p>13 Q. And you two have published together,</p> <p>14 have you not?</p> <p>15 A. We have.</p> <p>16 Q. In fact, the jury has seen me hold this</p> <p>17 book up before, The Third Wave of Asbestos Disease,</p> <p>18 Exposure to Asbestos in Place. And there's an</p> <p>19 article in here, "Mineral Fiber Content of Lung</p> <p>20 Tissue in Patients With Environmental Exposures,</p> <p>21 Household Context Versus Building Occupants," by</p> <p>22 Victor L. Roggli and William E. Longo. Right?</p> <p>23 A. Yes.</p> <p>24 Q. And this is one of the things that the</p> <p>25 two of you have published together. Correct?</p>

<p style="text-align: right;">Page 5063</p> <p>1 A. Yes.</p> <p>2 Q. You consider Dr. Roggli an expert in</p> <p>3 material analysis. Correct?</p> <p>4 Or Dr. Longo. What did I say?</p> <p>5 THE COURT: Longo.</p> <p>6 Q. Do you consider Dr. Roggli an expert in</p> <p>7 material analysis? Correct?</p> <p>8 THE COURT: You said it again.</p> <p>9 MR. MAIMON: Did I say it again? I'm</p> <p>10 not going to ask whether or not I should sit down.</p> <p>11 Q. Dr. Longo is an expert in material</p> <p>12 analysis. Correct?</p> <p>13 MR. CEDILLO: May we approach, your</p> <p>14 Honor?</p> <p>15 THE COURT: Yes.</p> <p>16 (At sidebar.)</p> <p>17 MR. CEDILLO: I wasn't allowed to get</p> <p>18 into his assessment of Dr. Longo on whether he's a</p> <p>19 junk scientist or not, or anything else. He's now</p> <p>20 going into building up Longo because you guys know</p> <p>21 each other and you've done this and done that.</p> <p>22 I want to make it very clear that I</p> <p>23 consider this opening the door, and I'm going to go</p> <p>24 in and ask him what he thinks of Dr. Longo because he</p> <p>25 is bringing out that Longo is an expert in material</p>	<p style="text-align: right;">Page 5065</p> <p>1 Honor, with Mr. Cedillo proclaiming that the door is</p> <p>2 open to do -- how he wants to do whatever he wants.</p> <p>3 THE COURT: Hey, let's not do that. All</p> <p>4 right? It's late in the day and it's a Monday. Can</p> <p>5 we just like get to it already? All right.</p> <p>6 (End of sidebar.)</p> <p>7 THE COURT: Don't ask Dr. Longo that</p> <p>8 question again.</p> <p>9 MR. MAIMON: I won't ask Dr. Longo</p> <p>10 again.</p> <p>11 Q. You consider Dr. Longo to be a qualified</p> <p>12 analyst. Correct?</p> <p>13 A. A materials analysis scientist, yes.</p> <p>14 Q. And careful scientist. Correct?</p> <p>15 A. Most of the time.</p> <p>16 Q. Okay. You're familiar with his 1995</p> <p>17 article. Correct?</p> <p>18 A. Yes.</p> <p>19 Q. And in previous testimony you've relied</p> <p>20 upon it in offering opinions. Correct?</p> <p>21 A. Yes.</p> <p>22 Q. In fact, you were asked this particular</p> <p>23 question in 19 -- I think it was -- yes, 1996, at the</p> <p>24 Roth trial. "Dr. Roggli, in fact, what conclusions</p> <p>25 did you rely upon from" -- I'm sorry.</p>
<p style="text-align: right;">Page 5064</p> <p>1 sciences. I wasn't allowed to go into that at all,</p> <p>2 and now counsel is opening that door.</p> <p>3 THE COURT: I didn't allow you to go</p> <p>4 into the unpublished studies of Longo. That's what I</p> <p>5 didn't allow you to do. Certainly now that</p> <p>6 plaintiff's counsel has said you consider him an</p> <p>7 expert in --</p> <p>8 MR. CEDILLO: Material scientist.</p> <p>9 THE COURT: -- material scientist, on</p> <p>10 redirect, if you have anything with regard to him not</p> <p>11 being an expert in that area, that's fine.</p> <p>12 MR. CEDILLO: Thank you. I'll go into</p> <p>13 that. All right. It's open.</p> <p>14 THE COURT: And any other areas --</p> <p>15 MR. MAIMON: I don't know that counsel's</p> <p>16 idea of what door has been opened is the same as the</p> <p>17 Court's.</p> <p>18 THE COURT: If there's any information</p> <p>19 out there that counsel wishes to use that would go</p> <p>20 into the issue of whether or not Dr. Longo is not an</p> <p>21 expert in that area --</p> <p>22 MR. MAIMON: I guess we'll cross that</p> <p>23 bridge when we get to it.</p> <p>24 THE COURT: -- or any other areas.</p> <p>25 MR. MAIMON: I was just concerned, your</p>	<p style="text-align: right;">Page 5066</p> <p>1 "Dr. Roggli, in fact, what conclusions do</p> <p>2 you rely upon from Dr. Longo in regard the ability of</p> <p>3 the Kent cigarettes to release asbestos fibers?"</p> <p>4 And you say, "Well, Dr. Longo's</p> <p>5 quantitative studies and the earlier qualitative</p> <p>6 studies indicates that the third point, crocidolite</p> <p>7 fibers are released from Kent cigarettes during the</p> <p>8 smoking process."</p> <p>9 Did I read that correctly?</p> <p>10 A. Yes.</p> <p>11 Q. And when you're talking about the</p> <p>12 earlier qualitative studies, you were talking about</p> <p>13 Fullam, Revere, and OCF. Correct?</p> <p>14 A. Let's go back to that statement.</p> <p>15 Q. Qualitative studies. Right?</p> <p>16 A. Yes.</p> <p>17 Q. Now, you have the article with you?</p> <p>18 A. Yes.</p> <p>19 Q. Dr. Roggli here talks about the testing</p> <p>20 that he did. Do you see that under "Treatments and</p> <p>21 Smoking"?</p> <p>22 A. Dr. Longo?</p> <p>23 Q. I'm sorry. Dr. Longo -- this article</p> <p>24 talks about the testing that was done. Right?</p> <p>25 A. Yes.</p>

<p style="text-align: right;">Page 5067</p> <p>1 Q. Okay. It says, "Two puffs were taken 2 from each of nine cigarettes." Right? 3 A. Trying to check what sentence you're 4 reading there. Oh, yeah, I got it. 5 Q. Okay? It says, "Before insertion into 6 the smoker, three of the cigarette filters were 7 rolled and three were pinched and then the remaining 8 three were not manipulated prior to insertion into 9 the apparatus." 10 Did I read that correctly? 11 A. Yes. 12 Q. He then says one sentence down, "After 13 lighting, the plunger was pulled to 30 plus or minus 14 milliliters within one to two seconds, and the 15 cigarette was extinguished by capping with a 16 preformed aluminum foil snuffer." 17 And did I read that correctly? 18 A. Yes. 19 Q. And milliliter, ml, is the same as a cc. 20 Right? 21 A. Yes. 22 Q. And so to simulate one puff he pulled 30 23 cc's. Right? 24 A. Yes. 25 Q. Okay. Now, the next paragraph talks</p>	<p style="text-align: right;">Page 5069</p> <p>1 A. I think it dealt with that issue, yes. 2 Q. And this does not say anything about 3 sonication, this talks about shaking the vial of 4 liquid. Right? 5 A. Yes. 6 Q. Okay. By the way, the tissue digestion 7 and analysis of asbestos fibers from the lung tissue 8 that you do is also an indirect preparation method. 9 Correct? 10 A. In what sense? 11 Q. Well, the tissues -- the asbestos fibers 12 aren't directly onto a filter. You -- you soak them 13 in bleach in order to get rid of the organic 14 material. Right? 15 A. Yes. 16 Q. And then you take a solution of that and 17 put it onto your grids. Right? 18 A. We actually dissolve the tissue in 19 bleach and then all that bleach goes through onto the 20 filter. 21 Q. Okay. So that's not originally -- my 22 point is it's not originally on the filter. Right? 23 A. What's not originally on the filter? 24 Q. The tissue. 25 A. You can't put the tissue directly onto a</p>
<p style="text-align: right;">Page 5068</p> <p>1 about what he did after he got the puff out. "The 2 puff residue inside the smoker was prepared and 3 examined as follows: The plunger was reinserted. 4 The syringe assembly was filled with 20 millimeters 5 of deionized distilled H2O, capped with paraffin, 6 hand shaken, and allowed to stand for 30 minutes." 7 Did I read that correctly? 8 A. Yes. 9 Q. Okay. "And then after standing, the 10 syringes were hand shaken, filled with 30 millimeters 11 with deionized distilled H2O, and then the contents 12 were pulled through a 30-millimeter filter." 13 Correct? 14 A. Yes. 15 Q. Okay. And that is that consistent with 16 what you testified earlier that the smoking was not 17 directly onto a filter, but it was washed out and 18 then put onto a filter which would indicate an 19 indirect preparation method. Correct? 20 A. Correct. 21 Q. Now, you're aware, are you not, that the 22 writings by Berman and Crump about the indirect prep 23 method were dealing with high-intensity sonication, 24 wherein you're sonicating materials that might be in 25 clusters of asbestos? Right?</p>	<p style="text-align: right;">Page 5070</p> <p>1 filter. 2 Q. I understand that. 3 A. Yeah. 4 Q. Okay. Good. 5 Dr. Longo did use controls and blanks, 6 did he not? 7 A. Yes. 8 Q. Okay. And Dr. Longo, in the last page 9 of the article, left-hand side, first full paragraph 10 says, "Our data probably underestimate the amount of 11 crocidolite released in an actual smoking situation 12 for three reasons." 13 Do you see that? 14 A. Which page is that? 15 Q. 2235. 16 A. Yeah, I see that. 17 Q. Okay. And then he gives the three 18 reasons as A, B, and C. Correct? 19 A. Yes. 20 Q. A was These tests only smoke -- "These 21 tests examined only smoke from the first two puffs, 22 and there was still substantial release of asbestos 23 during the second puff." 24 Did I read that correctly? 25 A. Yes.</p>

<p style="text-align: right;">Page 5071</p> <p>1 Q. In fact, Dr. Roggli estimated -- I'm 2 sorry. "Dr. Longo estimated that the asbestos from 3 the first two puffs of the cigarette represented less 4 than .001 percent of the crocidolite that was in the 5 filter." Correct? I'm reading on 2234, top of the 6 right-hand side. 7 A. Yes. 8 Q. Okay. In any event, this was only from 9 two puffs, correct, his data? 10 A. Yes. 11 Q. Go to 2235, B, "The numbers given in 12 conformance with EPA counting rules reflect 13 structures and not fibers." Correct? 14 A. Yes. 15 Q. And that's those aggregates that you 16 talked about earlier this morning. Right? 17 A. Yes. 18 Q. And now he says here that overall 18.7 19 percent of the structures were aggregates rather than 20 individual fibers. Right? 21 A. Yes. 22 Q. You have no idea, do you, what 23 percentage of those -- withdrawn. 24 What is the maximum diameter that would 25 be able to be inhaled and get to the outermost area</p>	<p style="text-align: right;">Page 5073</p> <p>1 A. Yes. 2 Q. And these are the -- that's the 3 crocidolite that he found. Right? 4 A. Yes. 5 Q. Okay. And there are fibers and there 6 are clusters there. Right? 7 A. Well, I mean, that's pretty much stuck 8 together. You would have to say the whole thing is a 9 cluster. 10 Q. So you're saying that all of this is 11 stuck together? 12 A. That's what it looks like from the 13 picture. All the fibers are touching each other. I 14 don't see any fiber sitting out free from the rest of 15 the group. 16 Q. Do you know how they are together? This 17 is on a -- magnified 3000 times. Right? 18 A. Yes. 19 Q. And this is a picture on the filter. 20 Right? 21 A. Yes. 22 Q. Do you know whether or not these are one 23 fiber or fibers laid one over the other or whether or 24 not they're actually stuck together? 25 A. They look like they're stuck together.</p>
<p style="text-align: right;">Page 5072</p> <p>1 of the lungs? 2 A. About 5 microns. 3 Q. Okay. You have no idea what percentage 4 of that 18.7 percent were larger than 5 microns in 5 diameter, do you? 6 A. True. 7 Q. Okay. Here he talks about those 8 aggregates being sometimes three, and oftentimes 9 hundreds of fibers. Correct? 10 A. Yes. 11 Q. Okay. And so out of -- so we know that 12 for 81.3 percent of what he found, those were fibers 13 and not structures. Correct? By doing reverse math. 14 A. Yes, by his indirect method, that's 15 correct. 16 Q. Okay. And out of that 18.7 percent, you 17 have no idea how many of them would be above or below 18 5 microns in diameter. Correct? 19 A. Yeah. Again, certainly, he can say from 20 Figure 4 above there that there is a 10-micron bar, 21 and that cluster there is hugely bigger than 5 22 microns in diameter. 23 Q. Do you know what -- can I have the Elmo, 24 please? That's the picture you're referring to. 25 Right?</p>	<p style="text-align: right;">Page 5074</p> <p>1 Q. But you don't know, do you? 2 A. I can't say with 100 percent certainty. 3 MR. MAIMON: Let's go back to the desk, 4 please. 5 Q. Now, you also talked about making 6 estimates of crocidolite burdens in the lung tissue. 7 Do you recall that? 8 A. Yes. 9 Q. And what you did back then is you 10 started with Dr. Longo's numbers of 132 million 11 fibers for one pack per day for a year. You applied 12 the 65 percent. You applied a half-life. And then 13 you used the dry weight of the lung as an average. 14 Right? 15 A. Yes. 16 Q. Okay. Now, when you do your lung 17 digestions, I just want to make sure we're clear, 18 you're not looking at the whole lung, are you? 19 A. No. 20 Q. In fact, when you do a lung burden study 21 and you're looking at someone's lungs, you're not 22 looking at 99.95 percent of the person's total lung 23 tissue, are you? 24 A. 99.95? 25 Q. 99.95.</p>

<p style="text-align: right;">Page 5075</p> <p>1 A. I'm not sure how you get to that number. 2 (P-138, Marked for Identification.) 3 Q. 138 is your trial testimony on 4 September 21, 2015. Is that correct? 5 A. Yes. 6 Q. And this was in a case in Pennsylvania. 7 Correct? 8 A. Yes. 9 Q. And if you take a look at page 127. 10 A. I'm there. 11 Q. Line 22. 12 "QUESTION: So when you do a lung burden 13 study and you're not -- your look at someone's lung 14 tissue, you're not looking at 99.95 percent of that 15 person's total lung tissue. Correct?" 16 And your answer was, "Correct." Right? 17 A. Yeah, based on the line before I said 18 it's about .5 percent, and that would be true, yes. 19 Q. Okay. And so when you take a look 20 at -- and you told us you bleach it and then you 21 count the asbestos fibers there. Do you recall that? 22 A. Yes. 23 Q. You count a certain number of fibers on 24 a grid. Right? 25 A. Certain number of fields or certain</p>	<p style="text-align: right;">Page 5077</p> <p>1 fall onto the floor, some of the fibers remain 2 unbreathed in the air, that any fibers that would be 3 released from a filter in a smoking product would be 4 deposited directly into the lungs." 5 That was your testimony at the time. 6 Correct? 7 A. Yes. 8 Q. And you said, "And clearance, that would 9 probably follow the same clearance pattern that you 10 see for crocidolite once it's deposited from any 11 other source." Right? 12 A. Yes. 13 Q. And you have the same testimony. You 14 haven't changed your mind about that, have you? 15 Crocidolite clears from the lung at the same rate and 16 in the same way no matter whether or not it comes 17 from a Kent cigarette or from an asbestos in a pipe. 18 Right? 19 A. That's correct. 20 Q. Okay. 21 Now, you said that the -- the change in 22 your opinion about depositing and clearing came from 23 a Berman and Crump publication? Right? 24 A. I believe so. 25 Q. Now, you know, don't you, that Berman</p>
<p style="text-align: right;">Page 5076</p> <p>1 number of fibers, whichever comes first. 2 Q. Okay. And the numbers that you count 3 aren't the total number of asbestos fibers in the 4 lung. Right? 5 A. Correct. 6 Q. You extrapolate in order to get what you 7 consider to be the total number of asbestos fibers in 8 the lung. Right? 9 A. Yes. 10 Q. Okay. Now, you also have testified in 11 the past, haven't you, Doctor, that there's a 12 difference -- or there was a difference in your mind 13 between looking at, like, an occupational setting 14 where somebody is in an atmosphere that might have 15 some asbestos in it and somebody actually putting a 16 Kent cigarette, filtered cigarette to their mouth and 17 breathing it in directly as far as the ability to 18 deposit particles and asbestos in the lung. Right? 19 A. Yes. I think I agreed there might be 20 some differences there. 21 Q. And you've stated that, "All that I can 22 say is that as opposed to breathing asbestos in a 23 workplace situation where a number of people are 24 sharing the same air and some of the fibers are 25 breathed by different individuals, some of the fibers</p>	<p style="text-align: right;">Page 5078</p> <p>1 and Crump, their work for the EPA has been rejected 2 by the EPA. Correct? 3 A. A bin model based upon their analysis, 4 which was not -- actually, the bin model was not made 5 by Berman and Crump, but by someone else, was 6 rejected by the EPA, yes. 7 Q. Okay. And Berman and Crump have 8 consulted for the asbestos industry, especially Kenny 9 Crump, over many decades. Is that correct? 10 A. I don't know about his consultation 11 history. 12 Q. Are you aware that he testified in front 13 of OSHA on behalf of the Asbestos Information 14 Association, a trade group that was opposing OSHA 15 regulations in 1972? 16 A. I may have heard that one time. I don't 17 recall, as I sit here today. 18 Q. Okay. Their numbers -- and they're 19 talking about depositing of asbestos in the 20 lungs -- was not dealing with a situation where 21 you're breathing it directly from a filtered 22 cigarette. That was occupational settings. Correct? 23 A. Yeah. I don't think -- I don't recall 24 them dealing with the issue of breathing straight 25 from a cigarette, no.</p>

<p style="text-align: right;">Page 5079</p> <p>1 Q. Okay. You have relied in the past of 2 animal studies that show that within ten days after 3 initial exposure crocidolite reaches the pleural 4 space in animal studies. Correct? 5 A. Yes. That was -- I think we had a 6 three-week exposure, and then within ten days after 7 the end of that exposure we identified crocidolite in 8 the pleural space, yes. 9 Q. Okay. And that was one of the bases for 10 your opinion when you testified that exposure to 11 Kent -- crocidolite asbestos from Kents could cause 12 mesothelioma. Correct? 13 A. Yes. 14 Q. Okay. And then you relied on 15 identification of crocidolite fibers in tissue 16 samples of people who had smoked Kents with 17 mesothelioma. Correct? 18 A. Yeah. There's -- there were three 19 cases, apparently, that I don't -- that -- the Brown 20 case, I think, was one that I analyzed and did not 21 find any crocidolite. 22 Q. Right. 23 A. The Roth case was one that Dr. -- 24 Q. Longo. 25 A. Dr. Longo, yes.</p>	<p style="text-align: right;">Page 5081</p> <p>1 from the Roth case. Do you recognize that? 2 A. Yes. 3 Q. And if you take a look at page 249. 4 Actually, it starts -- yes, 249. You were asked, 5 "How many cases would you need to see, how many cases 6 of individuals, how many individuals would you need 7 to see in which it was claimed that they smoked this 8 cigarette and in which it was claimed that it 9 released asbestos and which it was claimed that it 10 caused or contributed to causing the disease before 11 you would be reasonably certain that the cigarette 12 did, in fact, play a causal role in the development 13 of the disease?" 14 And then that was interrupted, and then 15 you were asked, "Doctor, you told us, I think, that 16 you would need to see more than five to conclude it 17 didn't. I want to know how many you'd need to see to 18 conclude it?" 19 And your answer was: "If you had -- and 20 let's just throw out mesothelioma. I don't care 21 whether the individual has mesothelioma or not. But 22 if you have 40 or 50 patients who smoked Kent 23 cigarettes, as much as a pack a day, from 1952 to 24 1956, and you show that there is no detectable 25 crocidolite in the lungs of any of those individuals,</p>
<p style="text-align: right;">Page 5080</p> <p>1 Q. I got it right. 2 A. -- Dr. Longo analyzed and found 3 crocidolite, a crocidolite fiber, at least a 4 crocidolite fiber in the pleural tissues. 5 And then the Szymczak case, I think, one 6 that Dr. Churg analyzed, and I don't know if that was 7 smoking only or if there was also occupational 8 exposure in that case. 9 Q. In any event, you were 10 asked by -- talked about the cross-examination by the 11 lawyers for Lorillard. Do you recall that? 12 A. Yes. 13 Q. And you were asked by them in deposition 14 that even if you, yourself, did digestion on five 15 former Kent smokers with mesothelioma and failed to 16 find elevated crocidolite levels, whether you could 17 exclude Kents as a causative factor in the next case 18 that came to you. Do you recall that? 19 A. In 1996? 20 Q. Yes. 21 A. I don't recall that specific question, 22 no. 23 Q. Okay. 24 (P-139, Marked for Identification.) 25 Q. I'm giving you your deposition testimony</p>	<p style="text-align: right;">Page 5082</p> <p>1 then I would say the issue was laid to rest." 2 Do you see that? 3 A. Yes. 4 Q. Okay. Dr. Longo, in the Roth case, did 5 find crocidolite in the pleural tissue. Correct? 6 A. Yes. 7 Q. And you considered that to be important 8 and a basis upon which to rely that his mesothelioma 9 was caused by his smoking Kent cigarettes. Correct? 10 A. At that time, yes, sir. 11 Q. Okay. And you indicated at that time 12 that if that tissue was tumor tissue, then that would 13 actually understate the amount of crocidolite because 14 the tumor grows and it would be dilute the number, 15 the dilution process would understate whatever 16 asbestos you found. Correct? 17 A. Yes. 18 Q. Okay. And you had pleural -- there was 19 pleural tissue and tumor tissue for Mr. Argento. 20 Correct? 21 A. Yes. 22 Q. Okay. Crocidolite is rarely, if ever, 23 found in the background population. Is that correct? 24 A. In our studies, that's correct. 25 Q. Okay. You were asked some questions</p>

<p style="text-align: right;">Page 5083</p> <p>1 about the Dodson and Hammar study?</p> <p>2 A. Yes, sir.</p> <p>3 Q. Do you have that article with you?</p> <p>4 A. I do.</p> <p>5 Q. This is Plaintiff's Exhibit 7. Do you</p> <p>6 have that?</p> <p>7 A. I think so.</p> <p>8 Q. Okay. It indicated that you actually</p> <p>9 looked at the same lung tissue that Drs. Dodson and</p> <p>10 Hammar looked at?</p> <p>11 A. Yes.</p> <p>12 Q. Okay. Now, they found different types</p> <p>13 of asbestos in the lung tissue. Correct?</p> <p>14 A. Yes.</p> <p>15 Q. They found amosite, tremolite,</p> <p>16 crocidolite, and anthophyllite and chrysotile.</p> <p>17 Right?</p> <p>18 A. Yes.</p> <p>19 Q. Okay. And even if the only documented</p> <p>20 history of exposure to asbestos was Kent cigarettes,</p> <p>21 we know that this person was exposed to other types</p> <p>22 of asbestos because they're finding other types of</p> <p>23 asbestos here -- and we'll get to your analysis in a</p> <p>24 minute. Okay? We agree on that?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 5085</p> <p>1 Q. You don't recall?</p> <p>2 A. I did not find crocidolite, but I don't</p> <p>3 recall if I found any other fibers.</p> <p>4 Q. All you remember is you found amosite.</p> <p>5 Right?</p> <p>6 A. Yes.</p> <p>7 Q. They also looked at not only at lung</p> <p>8 tissue, they looked at lymph node tissue. Correct?</p> <p>9 A. Yes.</p> <p>10 Q. And you mentioned earlier that the lymph</p> <p>11 nodes are one of the ways in which asbestos can get</p> <p>12 out of the lung. Right?</p> <p>13 A. Yes.</p> <p>14 Q. Did you look at that lymph node tissue?</p> <p>15 A. In this case?</p> <p>16 Q. No, in the case that we're talking</p> <p>17 about, P-7.</p> <p>18 A. I did not.</p> <p>19 Q. Okay. They found crocidolite -- most of</p> <p>20 the fibers that they found in the lymph nodes were</p> <p>21 crocidolite. Correct?</p> <p>22 A. Yes.</p> <p>23 Q. And you did not look at that lymph node</p> <p>24 tissue. Correct?</p> <p>25 A. Correct.</p>
<p style="text-align: right;">Page 5084</p> <p>1 Q. And they noted that in the article.</p> <p>2 Correct?</p> <p>3 A. What are you talking about?</p> <p>4 Q. On the results, page 681. Second</p> <p>5 paragraph, "Transmission electron microscopic</p> <p>6 evaluation."</p> <p>7 A. Yes.</p> <p>8 Q. Okay. And they counted five asbestos</p> <p>9 fibers and they said that's equivalent to over 20,000</p> <p>10 asbestos fibers per gram of wet tissue. Correct?</p> <p>11 A. Yes.</p> <p>12 Q. Third sentence.</p> <p>13 A. Yes.</p> <p>14 Q. Which would mean how many asbestos</p> <p>15 fibers in the total lung, approximately?</p> <p>16 A. You have to multiply that by roughly 60.</p> <p>17 Q. So you're talking about 1.2 million,</p> <p>18 around?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. Now, you looked at the lung</p> <p>21 tissue and you found amosite.</p> <p>22 A. Yes.</p> <p>23 Q. Did you find any of the other types of</p> <p>24 asbestos that they found?</p> <p>25 A. Don't recall.</p>	<p style="text-align: right;">Page 5086</p> <p>1 Q. You can't say whether or not there was</p> <p>2 crocidolite in the lymph node tissue, could you?</p> <p>3 A. Well, they found it. They reported it.</p> <p>4 Q. You believe them. Right?</p> <p>5 A. Sure.</p> <p>6 Q. Okay. And lymph nodes is one of the</p> <p>7 ways in which asbestos can get from the lung or the</p> <p>8 lymph tissue -- the lymphatics is one of the ways</p> <p>9 that asbestos can get from the lungs to the pleura.</p> <p>10 Correct?</p> <p>11 A. Yes.</p> <p>12 Q. And when asbestos gets --</p> <p>13 A. Wait.</p> <p>14 Q. From the lungs to the pleura.</p> <p>15 A. Yes.</p> <p>16 Q. Okay. And when asbestos gets from the</p> <p>17 lungs to the pleura via the lymphatics, that asbestos</p> <p>18 can still cause mesothelioma. Correct?</p> <p>19 A. If it's of the proper dimensions, yes.</p> <p>20 Q. The fact that it got there through the</p> <p>21 lymphatics doesn't mean that it's gone and not</p> <p>22 causing harm. Right?</p> <p>23 A. That's true. But the ones they found</p> <p>24 were in lymph nodes so they had already gotten to the</p> <p>25 lymph nodes. They're not going to get back to the</p>

<p style="text-align: right;">Page 5087</p> <p>1 lungs or the pleura.</p> <p>2 Q. No, I understand that. What you find in</p> <p>3 the lymph nodes is out of the lung. Right?</p> <p>4 A. Yes.</p> <p>5 Q. It's been cleared out of the lung.</p> <p>6 Right?</p> <p>7 A. Yes.</p> <p>8 Q. So asbestos that gets cleared out of the</p> <p>9 lung via the lymphatics can end up in the lymph</p> <p>10 nodes. Right?</p> <p>11 A. Yes.</p> <p>12 Q. It can also end up in the pleura.</p> <p>13 Right?</p> <p>14 A. Yes.</p> <p>15 Q. And if it ends up in the pleura, it can</p> <p>16 contribute to the causation of mesothelioma. Right?</p> <p>17 A. Potentially, Yes.</p> <p>18 Q. Okay. You mentioned that it's your</p> <p>19 opinion that fibers shorter than 5 microns do not</p> <p>20 cause mesothelioma. Did I hear that correctly?</p> <p>21 A. Yes.</p> <p>22 Q. Okay. You're aware that there are</p> <p>23 authors who have published on this subject that take</p> <p>24 a different point of view than you do. Correct?</p> <p>25 A. Yes, I think all the ones I'm familiar</p>	<p style="text-align: right;">Page 5089</p> <p>1 Q. All right. Take a look at the Boulanger</p> <p>2 article, 2014. "Quantification of short and long</p> <p>3 asbestos fibers to asbestos -- to assess asbestos</p> <p>4 exposure: A review of fiber size toxicity." Did I</p> <p>5 read that correctly?</p> <p>6 A. Yes.</p> <p>7 Q. And if you look all the way at the end</p> <p>8 where they have their conclusion, it says, "In view</p> <p>9 of the experimental and epidemiological studies, the</p> <p>10 toxicity of SAF, short asbestos fibers, cannot be</p> <p>11 dismissed."</p> <p>12 Do you see that?</p> <p>13 A. And this is on page?</p> <p>14 Q. Page 14 of 18.</p> <p>15 A. Fourteen of 18. And where does it say</p> <p>16 this, now?</p> <p>17 Q. "Conclusions."</p> <p>18 A. Okay. Yes.</p> <p>19 Q. They note the debate in the scientific</p> <p>20 community. Correct?</p> <p>21 A. Yes.</p> <p>22 Q. And then it says two sentences later,</p> <p>23 "Based on literature data determining the role of</p> <p>24 fiber size and biological effects of asbestos fibers</p> <p>25 and our present knowledge on their mechanism of</p>
<p style="text-align: right;">Page 5088</p> <p>1 with I had criticized for their opinions in my 2015</p> <p>2 review article on the topic.</p> <p>3 Q. Okay. Let's just take a look at a</p> <p>4 couple.</p> <p>5 (P-140, Marked for Identification.)</p> <p>6 (P-141, Marked for Identification.)</p> <p>7 Q. 140 is an article by Tomatis and the</p> <p>8 other is Boulanger. Right?</p> <p>9 A. Yes.</p> <p>10 Q. Okay. And both of these, the Tomatis</p> <p>11 article, 140, was published in 2007; and the</p> <p>12 Boulanger article, 2014. Correct?</p> <p>13 A. Yes.</p> <p>14 Q. And both of these articles take a</p> <p>15 position contrary to yours that short asbestos fibers</p> <p>16 are not toxic or don't cause disease. Correct?</p> <p>17 A. It's been a while since I've seen these.</p> <p>18 Q. Take a look at Exhibit 140. Let's go to</p> <p>19 the conclusion on page 67. Last paragraph. "With</p> <p>20 regard to the former" -- and that's talking about</p> <p>21 somebody else's argument -- "several studies provide</p> <p>22 evidence that fibers of all lengths and diameters</p> <p>23 play a role in the induction of mesothelioma."</p> <p>24 Did I read that correctly?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 5090</p> <p>1 action, it appears that the measurement of airborne</p> <p>2 asbestos concentrations limited to fibers with a</p> <p>3 length greater than 5 microns leaves out other types</p> <p>4 of fibers that may also have adverse health effects."</p> <p>5 Did I read that correctly?</p> <p>6 A. It says, "health adverse effects." It's</p> <p>7 an error in the print, not in what you said.</p> <p>8 Q. Okay. And even Dr. Dodson, who we</p> <p>9 looked at his paper before with Dr. Hammar, he has</p> <p>10 published on short asbestos fibers causing</p> <p>11 mesothelioma. Correct?</p> <p>12 A. Yes.</p> <p>13 Q. Now, you said that you have published on</p> <p>14 the subject of short fiber -- short asbestos fibers.</p> <p>15 Right?</p> <p>16 A. Yes.</p> <p>17 Q. You also presented on that subject at</p> <p>18 groups. Correct?</p> <p>19 A. I have.</p> <p>20 Q. One of the groups that you've made that</p> <p>21 type of a presentation to is a group called the</p> <p>22 Defense Research Institute. Correct?</p> <p>23 A. It is.</p> <p>24 Q. It's known as the "Voice of the Defense</p> <p>25 Bar." Correct?</p>

<p style="text-align: right;">Page 5091</p> <p>1 A. That's what they call themselves, yes.</p> <p>2 Q. And you have presented on the subject of</p> <p>3 short asbestos fibers at the DRI, the Defense</p> <p>4 Research Institute. Correct?</p> <p>5 A. Yes.</p> <p>6 Q. In fact, you actually submitted a</p> <p>7 manuscript to the people attending the DRI before you</p> <p>8 submitted it to publication for publishing. Is that</p> <p>9 right?</p> <p>10 A. I may have. I don't remember exactly</p> <p>11 the order. What actually happened was I</p> <p>12 prepared -- I was asked to give a topic at DRI.</p> <p>13 Because of an article I had read, I thought that the</p> <p>14 short fiber issue would be a good one.</p> <p>15 Once I wrote my manuscript for the DRI</p> <p>16 publication, I thought this is so good I need to</p> <p>17 publish it in the regular scientific literature, and</p> <p>18 then I submitted it to the Archives of Pathology and</p> <p>19 Laboratory Medicine, which was actually accepted for</p> <p>20 publication prior to my presentation at DRI.</p> <p>21 Q. One of the types of things that you</p> <p>22 testify about short asbestos fibers are when you</p> <p>23 appear on behalf of brake companies or companies who</p> <p>24 made cars where brake mechanics might have been</p> <p>25 exposed to asbestos from changing brakes and</p>	<p style="text-align: right;">Page 5093</p> <p>1 charge a flat fee if somebody wants to just retain</p> <p>2 you and have you do no work at all. Right?</p> <p>3 A. Well, if I -- if they retain me, I do</p> <p>4 charge for a retention fee. Whether I do no work at</p> <p>5 all is up to the person who sends the retainer.</p> <p>6 Q. Right. But in other words, they can</p> <p>7 have you do absolutely no work and you still earn a</p> <p>8 retention fee. Correct?</p> <p>9 A. They send me a retainer fee; and if they</p> <p>10 don't pay me anything else, then that would be what</p> <p>11 happens.</p> <p>12 Q. And that retention fee is \$700 a case.</p> <p>13 Right?</p> <p>14 A. Yes.</p> <p>15 Q. And overtime it averages about 500 a</p> <p>16 case?</p> <p>17 A. Yes.</p> <p>18 Q. And you've accepted about 13,000</p> <p>19 retentions. Correct?</p> <p>20 A. Yes, a little more than that.</p> <p>21 Q. It's about \$6.5 to \$7 million just from</p> <p>22 the retention fees. Right?</p> <p>23 A. Yes.</p> <p>24 Q. In addition, when you do do work, you</p> <p>25 charge at \$700 an hour. Correct?</p>
<p style="text-align: right;">Page 5092</p> <p>1 clutches. Right?</p> <p>2 A. It is an issue there, yes.</p> <p>3 Q. And you have testified in the past long</p> <p>4 ago that -- not Longo, but long ago -- that asbestos</p> <p>5 from brakes are capable of causing mesothelioma. Do</p> <p>6 you recall that?</p> <p>7 A. I think there was one case in 1988, and</p> <p>8 I have not testified that way since.</p> <p>9 Q. Okay. You changed your mind about that.</p> <p>10 Right?</p> <p>11 A. Yes, sir.</p> <p>12 Q. Okay. And in any event, you have come</p> <p>13 together with lawyers representing brake companies</p> <p>14 nationally and helped them put together presentations</p> <p>15 for use in courtrooms. Correct?</p> <p>16 A. Yes.</p> <p>17 Q. Now, you mentioned earlier -- let's do</p> <p>18 this now. You mentioned earlier that you charge for</p> <p>19 your time. Correct?</p> <p>20 A. Yes.</p> <p>21 Q. And when you're actually away from home</p> <p>22 and giving testimony, you charge at \$600 an hour with</p> <p>23 a cap of \$3,600. Right?</p> <p>24 A. Yes.</p> <p>25 Q. Another way in which you charge is you</p>	<p style="text-align: right;">Page 5094</p> <p>1 A. Yes.</p> <p>2 Q. And would it be fair to say, Dr. Roggli,</p> <p>3 that over the last several years you've averaged</p> <p>4 about \$150,000 from your consulting work in asbestos</p> <p>5 litigation?</p> <p>6 A. Yes.</p> <p>7 THE COURT: May I see counsel at</p> <p>8 sidebar?</p> <p>9 (At sidebar.)</p> <p>10 THE COURT: How much further?</p> <p>11 MR. MAIMON: I do believe I will be done</p> <p>12 by 4:30, Judge.</p> <p>13 THE COURT: We're still bringing him</p> <p>14 back tomorrow? Is he available to come back</p> <p>15 tomorrow?</p> <p>16 MR. CEDILLO: He'll come back tomorrow,</p> <p>17 your Honor.</p> <p>18 MR. MAIMON: I don't mind breaking now.</p> <p>19 I don't mind either way.</p> <p>20 THE COURT: Yeah, because I need to</p> <p>21 speak to the jurors, one juror.</p> <p>22 MR. MAIMON: Sure.</p> <p>23 THE COURT: All right. Stay here. Get</p> <p>24 off of sidebar for the moment.</p> <p>25 (End of sidebar.)</p>

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<p style="text-align: right;">Page 5095</p> <p>1 THE COURT: So members of the jury, we 2 are going to conclude today; but before we do, just 3 stay in your seats. 4 So, Dr. Roggli -- I want to make sure I 5 didn't say "Longo" -- we'll see you tomorrow morning. 6 MR. MAIMON: That's my line. 7 THE COURT: Yes, that's your line. 8 Thank you very much. You can leave that there and 9 we'll pick it up later. 10 (The witness is excused.) 11 THE COURT: So let's go back on sidebar. 12 MR. CEDILLO: The witness is excused, 13 your Honor? 14 THE COURT: Yes, I've excused the 15 witness. 16 Mr. Augello, can we see you, please. 17 (At sidebar with Juror No. 8.) 18 THE COURT: So, Mr. Augello, earlier you 19 had indicated to me you wanted to speak to me. And 20 you know I can't speak to you alone, that's why we're 21 here with everyone else. 22 JUROR: That's awesome. 23 THE COURT: Okay. But we are on 24 sidebar, so no one else in the courtroom can hear 25 you.</p>	<p style="text-align: right;">Page 5097</p> <p>1 going to complete the testimony of Dr. Roggli 2 tomorrow. And then there is one more live witness 3 who will expected hopefully to start tomorrow, but 4 may go into Wednesday. So we are not going to finish 5 by the time that I told you that we would. 6 However, I have worked with the attorneys 7 and we earlier had a discussion about when we are 8 going to be able to get this case to you. 9 Based upon what I see now, what the 10 attorneys see now, we expect that -- we anticipate 11 that we're going to get to closing statements on 12 Thursday, the 11th. There is a possibility of 13 Wednesday, but I think more likely Thursday. And 14 then submit the case to you. 15 And I realize it's not what I promised 16 to you when we met in June. And, certainly, if that 17 affects any one of you personally in some fashion, I 18 have to consider that. And we would need to discuss 19 that. Okay? 20 So I do know and I promised you, Mr. 21 Juror No. 1, Mr. Ciriello, that you were going to be 22 going on vacation, and I thought you were going to be 23 leaving on -- 24 JUROR: Next Saturday. 25 THE COURT: Next Saturday. We are not</p>
<p style="text-align: right;">Page 5096</p> <p>1 JUROR NO. 8: Okay. It's a 2 question -- well, the jury has a question. We want 3 to know are we going to end this Wednesday? 4 THE COURT: That's what I was going to 5 talk to all of you about. Today, I just wanted to 6 know, I'm bringing you here because I thought you had 7 a specific personal issue. 8 JUROR: No, It's for all of us. 9 THE COURT: Okay. Well, thank you. 10 JUROR: All right. I'll go back and sit 11 down. 12 THE COURT: Okay. Let's get off the 13 sidebar. 14 (End of sidebar.) 15 THE COURT: So members of the jury, your 16 spokesperson has brought to my attention an issue 17 that I was actually going to speak to you about 18 today. 19 So remember when we all convened back in 20 June, I provided all of you a calendar and I told you 21 that we expected this case to take no longer than the 22 24 days. And we had to take a number of days off due 23 to my personal emergencies -- again, not the 24 attorneys or the parties. 25 Well, after -- I expected that we're</p>	<p style="text-align: right;">Page 5098</p> <p>1 going to be here next Friday, never mind next 2 Saturday. Okay? 3 JUROR NO. 1: But the week after I will 4 be gone. 5 THE COURT: Yes, I would never ever do 6 that to you. I mean, you told us and you even came 7 back and said my vacation. Do not worry about that. 8 Okay? 9 But if any of you have any particular 10 concerns that you want to discuss with me, we can 11 discuss them today or any time tomorrow. I don't 12 want you to feel embarrassed about it or intimidated 13 by it, because I did present you a schedule and there 14 was just unforeseen issues that came up -- again, due 15 to me, not the attorneys or the parties. 16 So if any one of you want to stay after I 17 release everyone or sometime tomorrow, we can talk 18 about it. At any point in time please don't feel 19 intimidated by the situation. Okay? 20 So why don't we put your notebooks and 21 pens back in the envelopes and tomorrow we'll 22 reconvene at 9 a.m. 23 If anyone wants to stay to discuss any 24 matters with me today, again, with the attorneys 25 present, you can stay. If there's a concern you have</p>

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<p style="text-align: right;">Page 5099</p> <p>1 with our schedule or if you want to stay and talk to 2 me -- talk to us about it tomorrow, that's fine, too. 3 Okay. So we have everything packed? 4 People are smiling and you're laughing so you all 5 know what's going on over there and I don't. 6 And if you want to think about it, think 7 about it, but if you want to stay, please stay. I'm 8 going to open the door now. 9 Just leave the notebooks on that chair 10 and I'll make sure they get into chambers overnight. 11 Okay? Thank you for your patience. And we'll see 12 you tomorrow morning at 9 a.m., a member of my staff 13 will meet you. 14 (The jury leaves the courtroom except 15 for Juror No. 6.) 16 THE COURT: And then there was one. Why 17 don't you join us at sidebar. 18 (At sidebar.) 19 THE COURT: All right. So for the 20 record, this is Juror No. 6, Amanda Bowsky. 21 And you have not been here in a while, in 22 at least 24 days, and so no one in the back can hear 23 you, okay, but I do need to create a record. 24 Can you tell us what your concern is. 25 JUROR NO. 6: On Thursday I have an</p>	<p style="text-align: right;">Page 5101</p> <p>1 MR. CEDILLO: Can we point out to her 2 how much money she would save if she didn't go to 3 Vegas? 4 THE COURT: Well, I don't know. She 5 might have a lucky streak. 6 MR. DUNST: That's why she's taking the 7 actuarial exam. 8 MR. MAIMON: What time did she say the 9 test was? 10 MR. CEDILLO: 6:30. 11 MR. MAIMON: At night. 12 THE COURT: She has been studying for 13 it. The question is if we do summations -- it 14 doesn't sound like we're doing summations on 15 Wednesday. It's more likely on Thursday. 16 MR. CEDILLO: Right. And they would be 17 deliberating on Friday. 18 THE COURT: On Friday. 19 MS. LONG: If we can finish half the day 20 on Wednesday -- 21 THE COURT: Oh, my, you're so 22 optimistic. 23 MR. CEDILLO: She's not doing cross. 24 THE COURT: Oh, just laugh. 25 MR. MAIMON: Yes.</p>
<p style="text-align: right;">Page 5100</p> <p>1 actuarial exam that I've been preparing for a very 2 long time. And then I leave for vacation on Friday. 3 THE COURT: Okay. So when you say 4 Thursday -- 5 JUROR NO. 6: This Thursday. 6 THE COURT: Thursday the 11th. And you 7 leave for vacation on Friday the 12th. 8 JUROR NO. 6: Yes. 9 THE COURT: Okay. Where are you going 10 on vacation? 11 JUROR NO. 6: We're going to Vegas for 12 the weekend and then we're going to California. 13 THE COURT: Oh, good for you. And this 14 is actuarial exam is on the 11th? 15 JUROR: Yes. 16 THE COURT: Okay. And what time is that 17 at? 18 JUROR: It's at 6:30 at night. 19 THE COURT: Okay. And you've been 20 studying throughout this trial? 21 JUROR NO. 6: Yes. 22 THE COURT: Okay. Could you excuse us 23 for a moment. I need to discuss with counsel. 24 (Juror leaves sidebar.) 25 THE COURT: Okay.</p>	<p style="text-align: right;">Page 5102</p> <p>1 THE COURT: Okay. 2 MR. MAIMON: Says that I laugh. 3 What I was going to suggest, Judge, I 4 mean, obviously she told us about the vacation ahead 5 of time. And I would make the same commitment to her 6 that you made to Juror No. 1 is that we won't make 7 you lose your vacation. I wouldn't dismiss her yet. 8 I don't see a reason to. 9 THE COURT: Anything can happen. Right? 10 MR. MAIMON: Anything could happen. And 11 I mean, she's put in this much time to it. 12 THE COURT: All right. 13 MR. MAIMON: I mean, if it turns 14 out that she's -- I mean, we have nine. 15 THE COURT: I have a feeling that we 16 have one more that's going to come up that didn't 17 want to come up today because they were sharing 18 glances back and forth. And that is Juror No. 2, 19 Miss Lockhart, so we may be talking to her. 20 All right. Is there any objection to my 21 not releasing her now? 22 MR. DUNST: I think we should leave it 23 up to her, because I think that we know -- we know 24 that we're not going to get done until at least 25 Thursday. So theoretically she's going to be here.</p>

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<p style="text-align: right;">Page 5103</p> <p>1 She is not going to be able to deliberate no matter 2 what happens. And, plus, you know, I mean, if she 3 could deliberate, then it would be a different story; 4 but if she can't deliberate, then I would give her 5 the choice because she may want to spend the rest of 6 the day Thursday since she's not going to deliberate 7 in a case she's been here for two months already 8 spending more time studying for her actuarial exam. 9 THE COURT: Okay. 10 MR. MAIMON: That's reasonable. 11 MR. DUNST: That would be my -- 12 THE COURT: Any objection? 13 MR. CEDILLO: Not a strong objection, 14 your Honor. My instinct was to not do it yet. Let's 15 see what happens. Tomorrow is only Tuesday. We 16 could pull the trigger, you know, tomorrow or 17 Wednesday. For now keep her. She may -- she may 18 make the call closer in time to just stay. 19 MR. DUNST: I agree. 20 MR. CEDILLO: As opposed to release her 21 now. It may come down to her call anyway. 22 THE COURT: Okay. 23 MR. CEDILLO: But if you tell her okay, 24 now you can stay, she may find that better than 25 Vegas. Let's give her the chance.</p>	<p style="text-align: right;">Page 5105</p> <p>1 JUROR NO. 6: Yes. 2 THE COURT: All right. We'll see you 3 tomorrow morning. Thank you. Let me let you out. 4 (End of sidebar.) 5 THE COURT: All right. We're off of 6 sidebar and back live. 7 Were we going to work on that issue now 8 about reading in and there was going to be an 9 objection? Something with regard to -- 10 MR. MAIMON: Mr. Orcutt. 11 THE COURT: Did we finish the Orcutt 12 testimony? 13 MR. CEDILLO: No, your Honor. 14 MR. MAIMON: We have cross. We finished 15 direct. 16 MR. CEDILLO: It's about halfway done. 17 THE COURT: Okay. Let me get my Orcutt 18 binder. I will be right back. 19 MR. MAIMON: You ruled completely, 20 Judge. 21 MR. BERGER: We misunderstood. We 22 thought you meant how much time was left on the 23 Orcutt video we started already. 24 THE COURT: No. 25 MR. BERGER: I misunderstand your</p>
<p style="text-align: right;">Page 5104</p> <p>1 THE COURT: All right. 2 Miss Bowsky, could you join us again. 3 (Juror returns to sidebar.) 4 THE COURT: Tell me, where is your 5 actuarial test being given? 6 JUROR: Clark, New Jersey. 7 THE COURT: Okay. And it starts at 8 6:30 p.m.? 9 JUROR: Yes. 10 THE COURT: I want you to know we 11 appreciate all the time that you've invested in this 12 trial because it has been a significant investment. 13 I assure you I will do nothing to interfere with your 14 vacation or your test; but if it's okay with you, 15 because we just never know what may happen. Perhaps 16 the testimony coming in will go quicker than I 17 anticipate right now because these are all 18 projections, would you mind staying with us a little 19 bit longer? Again, realizing I'm not going to do 20 anything to impact your taking that test and getting 21 out of here in enough time to take that test and your 22 vacation. Is that okay with you? 23 JUROR NO. 6: Yes. 24 THE COURT: Okay. You're comfortable 25 with that for now?</p>	<p style="text-align: right;">Page 5106</p> <p>1 question. 2 THE COURT: I apologize. We finished 3 page and line designations of Orcutt. 4 MR. CEDILLO: No, your Honor. May I 5 explain? 6 THE COURT: Yes, because I think Mr. 7 Berger is telling me something else. 8 MR. CEDILLO: There is another segment 9 of Mr. Orcutt from the Quirin case, but we've worked 10 with this, the deposition that we took here. 11 The deposition that we took here centered 12 on the Longo and Millette studies and photographs, 13 and so forth that are not in play. So we'd like some 14 very short passages from Mr. Orcutt where he 15 addressed the Longo pictures that are part of his 16 1995 report. 17 THE COURT: Okay. 18 MR. CEDILLO: We have exchanged those 19 with counsel. When we finished the playing of the 20 deposition, because I was concerned about scope 21 issues, and so forth, I said, "Heads up, there's 22 another segment of Mr. Orcutt that I want read as 23 part of my direct." And then we exchanged that 24 portion with counsel. 25 They have not agreed and they have</p>

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<p style="text-align: right;">Page 5107</p> <p>1 objections to it. It's very short, your Honor. 2 THE COURT: Okay. So I need to see 3 that. Okay. 4 MS. LONG: We have an objection to the 5 entire transcript, your Honor, and I would just like 6 to give you some background on this issue. 7 THE COURT: Sure. 8 MS. LONG: In early May, Mr. Berger 9 called me and said, "We want to present Mr. Orcutt by 10 his prior testimony in the Quirin case." And he sent 11 me the Quirin deposition. And he said, "If you don't 12 agree to that, then we want to do a trial 13 preservation deposition down in North Carolina." 14 I read the Quirin transcript and I 15 replied to Mr. Berger and I told him, "We don't agree 16 to that. We want to do the trial preservation." 17 The week before trial, I went down to 18 North Carolina and took a discovery dep, and then we 19 did the trial preservation of Mr. Orcutt. And now 20 that we've shown his whole transcript, they could 21 have asked him what they want to ask him here at that 22 video deposition where I would have had an 23 opportunity to cross-examine him on the matter. They 24 did not do that. They chose to ask about certain 25 photos and not the published articles. That was</p>	<p style="text-align: right;">Page 5109</p> <p>1 So we have an objection to using any of 2 this witness' transcript. This isn't the way it's 3 done, your Honor. You put a witness on once and 4 that's your shot. You don't get to go, oh, I don't 5 like his testimony so now I want to put in his prior 6 depositions where the other party had no opportunity 7 to cross-examine. 8 And, again, not an unavailable witness. 9 He was willing to come and do a deposition for them. 10 He was willing to come and do trial testimony for 11 them. As we saw in the video, he's very thankful and 12 loyal to Lorillard. I'm sure he would if they asked 13 make the trip for them. And regardless of whether he 14 would or not, they had their shot. And if Mr. 15 Cedillo didn't ask the questions he wanted to ask, 16 that was a decision he made. I would have conducted 17 the cross different if it was in the middle of trial, 18 too, but we live with what we did, what we agreed to 19 before trial. And we didn't give them a hard time 20 before trial about him being available or 21 unavailable. We did them the courtesy of going down 22 to North Carolina and doing the dep. And now they're 23 trying to present the testimony that we wouldn't have 24 agreed to anyway. So that's our objection 25 MR. CEDILLO: Okay. And you heard</p>
<p style="text-align: right;">Page 5108</p> <p>1 their choice. They chose to do a trial preservation 2 instead of bringing Mr. Orcutt up here. There was no 3 indication in the discovery deposition or the video 4 deposition that he's not able to travel to New York 5 from North Carolina. You saw on the video. He's a 6 healthy man. He's in his 80s, but he can come here. 7 They haven't given any proffer that he's unavailable 8 to come here. 9 Again, before trial, I made the trip to 10 North Carolina, took the time, prepared to do a 11 cross-examination. Did all that. 12 And so this would be testimony that we 13 haven't had the opportunity to cross-examine on, that 14 they chose how to -- Mr. Cedillo chose how to conduct 15 his direct examination. And as he's pointed out many 16 times throughout this trial, he knows these cases, 17 he's tried these cases before. He certainly could 18 have asked about the Longo article in that trial 19 preservation testimony when I had the opportunity to 20 cross-examine on the matter. And this is not just an 21 unavailable witness that they're now trying to 22 present via prior testimony. When they made that 23 offer prior to the trial, we said we don't agree to 24 that. And now in the middle of trial they're trying 25 to do something that we could have done before trial.</p>	<p style="text-align: right;">Page 5110</p> <p>1 everything about five different times, your Honor, 2 the same objection over and over again. It doesn't 3 change the fact -- 4 THE COURT: It doesn't give it more 5 weight. Okay. Let's just get to the heart of it. 6 MR. CEDILLO: It doesn't change that 7 under the rules we can bring him in if it is someone 8 that was examined by people who had the opportunity 9 and the same level of interest. 10 Secondly, what counsel is not telling 11 you is that they made the strategic decision not to 12 use the Millette and the Longo 2010 and 2012 13 materials at the trial. That was always in the case. 14 THE COURT: You mean the unpublished 15 studies? 16 MR. CEDILLO: Yes, the studies that they 17 did for litigation and the photographs. And quite 18 frankly, your Honor, that has been the focus -- 19 because I do know these cases. That has been the 20 focus that they're going on because they understand 21 the -- the junk science that the Cancer Research 22 amounts to. He redid it. He resaid it and came up 23 with all these pictures. And that was what was in 24 play at the time that we took the deposition. 25 The availability or not availability,</p>

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<p style="text-align: right;">Page 5111</p> <p>1 your Honor, is very reciprocal. Mrs. Rose Argento, 2 they chose to bring her by deposition. She lives 3 around here somewhere, and I didn't ask them for any 4 showing of unavailability. I extended them the 5 courtesy that they want to bring her by deposition, 6 they don't want to bring her live. Fine. I didn't 7 give them a hard time with it at all. 8 And they were asked -- Mr. Orcutt was 9 asked by Ms. Long, the case is going to be tried in 10 New Jersey, why can't you make it to trial. 11 He said, "Age and recovering from 12 surgery." 13 And she said, "Oh, and I hope you're 14 recovering well." 15 So the unavailability rationale was 16 given by the witness. And, yes, we're very grateful 17 that counsel extended us that courtesy, just as we 18 were extending them the courtesy as well for 19 witnesses that wouldn't have to travel as far. 20 So I think that under the rule we're 21 allowed to do it, your Honor. 22 I'll -- I'll also point out to the Court 23 that when they wanted to do some numbers, 24 calculations that were within the range of what Dr. 25 Longo had done in the '95 article, because they were</p>	<p style="text-align: right;">Page 5113</p> <p>1 say, no, bring him to New Jersey. 2 THE COURT: What kind of surgery did he 3 have? 4 MR. BERGER: I don't think he ever told 5 us. 6 MR. CEDILLO: I think it was the private 7 kind of -- 8 THE COURT: Okay. Let's keep it that 9 way. 10 MS. LONG: None of this changes the fact 11 that Mr. Cedillo had a chance to do his direct. He 12 chose not to ask about the Longo article. And 13 now -- and robbing me now by putting it in via this 14 deposition of the chance to cross-examine on it. 15 But he made a strategic decision to do a 16 video dep before trial. He made a strategic decision 17 about which studies to question about. They were the 18 parties who moved to exclude the unpublished studies, 19 all of them. We prevailed on the published Longo 20 study, but they moved to exclude all of the studies. 21 That wasn't us, your Honor. We didn't fight on the 22 unpublished studies. We didn't oppose a motion on 23 the unpublished studies. But that was their motion, 24 not ours. So to say we tried to keep them out 25 because we know the Cancer Research article is junk</p>
<p style="text-align: right;">Page 5112</p> <p>1 within the range even though they weren't part of the 2 article, the Court allowed it. These are the 3 photographs that are Dr. Longo used. Certainly, I 4 mean, if within the range is a criterion, we 5 certainly fit within the range. 6 And, your Honor, we're talking about six 7 pages of Q and A from the Quirin deposition that go 8 through a couple of the photographs that are used by 9 Longo in the published article. So we're not talking 10 about extending -- 11 THE COURT: You said in the published 12 article? 13 MR. CEDILLO: Yes, your Honor. We're 14 not talking about, you know, extending this with a 15 whole other transcript and go over anything in a way 16 of rehashing. 17 MS. LONG: Well, your Honor, that 18 testimony about recovering from surgery was taken two 19 months ago, so if he's -- I don't think that makes 20 the unavailability proffer is all I'm saying. 21 THE COURT: How old is he? 22 MS. LONG: He's in his 80s. 23 MR. BERGER: 85 or 86. 24 MS. LONG: That's why we went down and 25 took the dep. I didn't object to going. I didn't</p>	<p style="text-align: right;">Page 5114</p> <p>1 science is not an appropriate representation of the 2 record. 3 What it boils down to is you don't put a 4 witness on twice, your Honor, and that's essentially 5 what they're trying to do. 6 THE COURT: How is that, Dr. Reinert, 7 you wanted him in your case-in-chief. We sat 8 through -- 9 MS. LONG: But that's one party putting 10 him on once and then the other party putting him on 11 second. And we needed to put him on in our case. We 12 chose to do it by prior video. If they want to bring 13 him live to say whatever he's going to say that 14 wasn't in the video, that's one thing, but this is 15 the same party calling the same witness twice, and 16 the second time via prior transcript where we haven't 17 had the opportunity to cross-examine. 18 MR. CEDILLO: Your Honor, he hasn't even 19 gone on once. He's gone on half. And I brought it 20 up at the end of the week when we were last here 21 because I want him to be part of the once. 22 And, your Honor, if -- if the thrust of 23 the attack is that Cedillo messed up and should have 24 done something, then that's my fault and I should be 25 held accountable for it, but you shouldn't hold my</p>

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<p style="text-align: right;">Page 5115</p> <p>1 client accountable for something.</p> <p>2 The issue of the challenge to the</p> <p>3 Millette and Longo studies because it's junk science</p> <p>4 and it was an expert challenge, and what they were</p> <p>5 doing was driven by litigation and we had good</p> <p>6 grounds to ask the Court to consider it. And counsel</p> <p>7 withdrew that and said, no, we're not going to use</p> <p>8 him at all so you never had to rule.</p> <p>9 THE COURT: Okay. So, again, and I</p> <p>10 realize I may have asked this more than once. This</p> <p>11 testimony that you're seeking to have played to the</p> <p>12 jury is with regard to pictures that were in the</p> <p>13 published study. Is that correct?</p> <p>14 MR. CEDILLO: Yes, your Honor.</p> <p>15 MS. LONG: I don't believe they're in</p> <p>16 the article, themselves, your Honor.</p> <p>17 MR. BERGER: They are from Dr. Longo's</p> <p>18 study that was the subject -- the subject of the</p> <p>19 published article. They are photographs of the</p> <p>20 filter tips and the packs.</p> <p>21 THE COURT: How do we know that? Is</p> <p>22 that an issue, whether or not they were a part --</p> <p>23 MR. BERGER: It's not.</p> <p>24 MS. LONG: It hasn't been proven to us,</p> <p>25 your Honor.</p>	<p style="text-align: right;">Page 5117</p> <p>1 with a Pennsylvania tax stamp. And that's what these</p> <p>2 pictures are that Mr. Orcutt is talking about, that's</p> <p>3 where they come from.</p> <p>4 MR. CEDILLO: They are identified in</p> <p>5 words in the article.</p> <p>6 MR. MAIMON: We don't dispute, your</p> <p>7 Honor, Dr. Longo did a study that eventually was</p> <p>8 published. We do not dispute. We've accepted the</p> <p>9 representation of counsel that the photographs that</p> <p>10 Mr. Orcutt was asked about in the other deposition,</p> <p>11 not the de bene esse for this case -- were from the</p> <p>12 initial study that Dr. Longo did which resulted in</p> <p>13 the published study. We don't dispute that.</p> <p>14 Our complaint is that we've been denied</p> <p>15 cross-examination of it.</p> <p>16 THE COURT: So motion to bar the</p> <p>17 unpublished studies of Dr. Longo came from the</p> <p>18 defendants.</p> <p>19 MR. MAIMON: Yeah, those are the</p> <p>20 pictures that Mr. Cedillo showed Mr. Orcutt in his</p> <p>21 de bene esse testimony.</p> <p>22 MR. CEDILLO: Because there was an</p> <p>23 attempt in the discovery not only were they the</p> <p>24 pictures of Dr. Longo published -- not published but</p> <p>25 prepared for litigation, but also Dr. Millette who</p>
<p style="text-align: right;">Page 5116</p> <p>1 All right. We accept it.</p> <p>2 MR. MAIMON: We've accepted that</p> <p>3 representation, your Honor.</p> <p>4 THE COURT: Okay.</p> <p>5 MR. CEDILLO: And one of the pictures is</p> <p>6 in the -- in the published article, your Honor.</p> <p>7 There is a picture in there. But there are others.</p> <p>8 MR. BERGER: Yeah. And in addition to</p> <p>9 the filter tip pictured in the article, we have -- he</p> <p>10 has pictures of the packages that the cigarettes he</p> <p>11 tested came out of, as well as from the opened pack</p> <p>12 you see the tips of the filters.</p> <p>13 THE COURT: Okay.</p> <p>14 MR. BERGER: From the published -- the</p> <p>15 cigarettes that were involved in the published study.</p> <p>16 THE COURT: Okay. You have indicated</p> <p>17 that one was included in the published study.</p> <p>18 MR. CEDILLO: Yeah, that I'm certain of.</p> <p>19 THE COURT: Okay. Are the other ones</p> <p>20 referenced in the published study or just any old</p> <p>21 picture?</p> <p>22 MR. BERGER: Yes. No, the published</p> <p>23 study -- if you remember, in the article he says the</p> <p>24 cigarettes that I've tested came from two packs, a</p> <p>25 1952 pack with the Vermont tax stamp and a 1955 pack</p>	<p style="text-align: right;">Page 5118</p> <p>1 also used Dr. Longo and had a separate set of tests.</p> <p>2 And those were the subject of motions that were part</p> <p>3 of expert challenges, moving to exclude. You never</p> <p>4 ruled on that because they withdrew it and said we're</p> <p>5 not going to go there.</p> <p>6 THE COURT: But that was after the</p> <p>7 deposition.</p> <p>8 MR. CEDILLO: That happened while we</p> <p>9 were here.</p> <p>10 THE COURT: That happened after the</p> <p>11 deposition took place.</p> <p>12 MR. CEDILLO: Yes.</p> <p>13 MR. BERGER: At the time of the</p> <p>14 deposition, the state of the record was the</p> <p>15 plaintiffs had their two experts, Dr. Moline and</p> <p>16 Dr. Cummings, both had the unpublished 2010 Millette</p> <p>17 study and the unpublished 2012 Longo study in their</p> <p>18 reliance materials. They were at issue in the case</p> <p>19 at the time the de bene esse was done.</p> <p>20 MS. LONG: And they had the published</p> <p>21 article in their reliance materials. They were --</p> <p>22 THE COURT: No question. So you went</p> <p>23 down and you took a discovery dep first. Right?</p> <p>24 MS. LONG: Yes.</p> <p>25 MR. MAIMON: And during that time frame,</p>

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<p style="text-align: right;">Page 5119</p> <p>1 did anybody get into these issues of the photographs?</p> <p>2 MS. LONG: Not of the Longo published</p> <p>3 article. They did get into the issue of the</p> <p>4 unpublished.</p> <p>5 MR. CEDILLO: Not here in the discovery</p> <p>6 deposition, your Honor. That was all her. I didn't</p> <p>7 ask questions in the discovery deposition.</p> <p>8 MS. LONG: Right. I asked about it</p> <p>9 because I read his prior transcripts where he talked</p> <p>10 about the same photo. I probed it in the discovery</p> <p>11 dep. And then on direct, in the video in the trial</p> <p>12 transcript, Mr. Cedillo spent a lot of time on the</p> <p>13 pictures. But he didn't do the Longo published</p> <p>14 article, so I didn't ask about that.</p> <p>15 MR. CEDILLO: Obviously because --</p> <p>16 (A discussion off the record.)</p> <p>17 THE COURT: So could I ask why his</p> <p>18 de bene esse, which he was ill, age, recovering from</p> <p>19 surgery, why you didn't ask about these then?</p> <p>20 MR. CEDILLO: Because, your Honor, that</p> <p>21 was -- that was my judgment call. The emphasis was</p> <p>22 on the 2010 and 2012 photographs. They were studies</p> <p>23 that were designed to address all the infirmities</p> <p>24 that we had challenged Dr. Longo directly on as</p> <p>25 recently as the Couscouris case. And the entire</p>	<p style="text-align: right;">Page 5121</p> <p>1 your Honor, is that this testimony would be</p> <p>2 cumulative. In the Block videotape that they've</p> <p>3 offered, they showed Mr. Block these exact photos</p> <p>4 that they now want Mr. Orcutt to testify about and</p> <p>5 asked him do those represent what Kent cigarette</p> <p>6 would -- would have looked like.</p> <p>7 And your Honor ruled about the</p> <p>8 admissibility of that testimony. Albeit, we weren't</p> <p>9 at those depositions, but under the rules your Honor</p> <p>10 allows -- you know, that unavailability, Mr. Block is</p> <p>11 deceased, and we're stuck with that</p> <p>12 cross-examination. So they do have these photographs</p> <p>13 being questioned and somebody, unfortunately, did a</p> <p>14 cross-examination, maybe not to our liking, but</p> <p>15 Mr. Block was produced for trial</p> <p>16 testimony -- Mr. Orcutt was produced for trial</p> <p>17 testimony.</p> <p>18 THE COURT: Remind me again -- anything</p> <p>19 further?</p> <p>20 MR. MAIMON: No. And so it would</p> <p>21 even -- even assuming they had done it, it would have</p> <p>22 been cumulative of what somebody else said the same</p> <p>23 thing. And now to deny the cross-examination on</p> <p>24 somebody they already have the testimony on from</p> <p>25 somebody else we believe even compounds the</p>
<p style="text-align: right;">Page 5120</p> <p>1 focus in the last two trials in this case have been</p> <p>2 on this new work that Dr. Millette did on Longo</p> <p>3 materials and that Dr. Longo himself redid to try to</p> <p>4 address it. That was -- that was where the emphasis</p> <p>5 has always been in these cases.</p> <p>6 MS. LONG: Your Honor, those were not</p> <p>7 our trials and they were not Dr. Cummings or</p> <p>8 Dr. Moline, so there's no reason they would have</p> <p>9 thought that Dr. Cummings and Dr. Moline would put</p> <p>10 any emphasis on those articles that they didn't put</p> <p>11 on the published article.</p> <p>12 So regardless of what Mr. Cedillo's prior</p> <p>13 experience is, that has nothing to do with this case</p> <p>14 because our experts did not at all focus on those</p> <p>15 articles more than they did the published article.</p> <p>16 MR. CEDILLO: Well, your Honor, their</p> <p>17 experts focus on what they strategically make</p> <p>18 decisions that they don't have to address because</p> <p>19 they're going to go in another direction.</p> <p>20 THE COURT: All right. I just want an</p> <p>21 opportunity to look at this real quickly. We'll go</p> <p>22 off the record.</p> <p>23 (A discussion is held off the record.)</p> <p>24 THE COURT: Go back on the record.</p> <p>25 MR. MAIMON: The only thing I would add,</p>	<p style="text-align: right;">Page 5122</p> <p>1 prejudice.</p> <p>2 THE COURT: Remind me again, Mr. Orcutt</p> <p>3 is who in connection with --</p> <p>4 MR. MAIMON: Sales.</p> <p>5 MR. CEDILLO: He was a salesman that</p> <p>6 would go and rotate the stock and was in charge of</p> <p>7 making sure that what was on the shelf was sellable.</p> <p>8 And if it was damaged he would remove them and send</p> <p>9 them back. And I think there's either already or</p> <p>10 there's going to be testimony that they would be sent</p> <p>11 back because the tag -- the tag had value, and</p> <p>12 they take them back and be able to take them off and</p> <p>13 get a refund for it.</p> <p>14 THE COURT: Okay.</p> <p>15 MR. CEDILLO: So that he was involved in</p> <p>16 making sure that the product was high quality and</p> <p>17 sellable. And he says that the things that Dr. Longo</p> <p>18 was working with is not anything approximating what</p> <p>19 the consumer would be selling. And that's a very</p> <p>20 major point in our criticism of Dr. Longo's work.</p> <p>21 MS. LONG: If it's such a key point, I</p> <p>22 don't know why he didn't they bring it out in the</p> <p>23 direct exam.</p> <p>24 And, also, they did get out the testimony</p> <p>25 from Mr. Orcutt about how it was important to bring</p>

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<p style="text-align: right;">Page 5123</p> <p>1 the cigarettes back, and all the stuff about the 2 freshness, and the odors, and the heat, and the sun 3 and the damp. That all came in and he can argue 4 about that in closing so he did have Mr. Orcutt on 5 that subject. 6 And, again, if it's such a key part of 7 their case, why didn't they do it so we could 8 cross-examine on it? 9 MR. CEDILLO: And we did do it on the 10 photographs of the subsequent Longo and Millette 11 studies that were prepared for litigation. We did go 12 into all these topics. We also did it in the Quirin 13 case on the Longo. Did not do it in the deposition 14 of Mr. Orcutt for here as it relates to Longo. 15 THE COURT: I understand. 16 MR. CEDILLO: And that's why I want to 17 use the Quirin. 18 THE COURT: And tell me, with regard to 19 Mr. Block, so Mr. Block is already going through 20 these photographs in his testimony which the jury 21 will see? 22 MR. BERGER: Yes. 23 THE COURT: There's a yes? 24 MR. CEDILLO: Yes, your Honor. 25 MR. BERGER: Yes.</p>	<p style="text-align: right;">Page 5125</p> <p>1 witness who is unavailable who was there and actually 2 produced or was the engineer behind the production of 3 the machine that created the filters and would know 4 best, you know, what they looked like. 5 And now this testimony of a salesperson 6 that you could have. I mean, the question does not 7 allowing this testimony in prejudice to your client 8 to the point that it overrides the prejudice to the 9 plaintiff who would have been prepared to 10 cross-examine this witness who may not be able to 11 travel here. And I accept an 86-year-old had 12 surgery, might take more than two months to recover, 13 Ms. Long. 14 MS. LONG: He looks good, your Honor. 15 THE COURT: But I mean, if this is that 16 important to you, why can't we produce him by video, 17 like live? 18 MR. CEDILLO: Well, your Honor, you've 19 heard all my argument. It's certainly within the 20 range of what was -- everybody was on notice of. 21 There isn't anything -- and if you look at the six 22 pages, there isn't anything that they didn't do with 23 the Millette or Longo later pictures. 24 THE COURT: Except those are unpublished 25 studies and that's out of this case.</p>
<p style="text-align: right;">Page 5124</p> <p>1 THE COURT: And Mr. Block's role with 2 Lorillard? 3 MR. CEDILLO: He was the guy that made 4 the machine. 5 MR. BERGER: The chief engineer. 6 THE COURT: That's right. So you're 7 getting that testimony in from your chief engineer 8 who, as I recall the testimony was there, and they 9 did the product runs and whatever. So now he was 10 asked to look at the pictures that were either part 11 of or referred in the Longo published studies and 12 give testimony with regard to that. 13 MR. CEDILLO: That's correct, your 14 Honor. 15 THE COURT: And he's unavailable. 16 MR. CEDILLO: He's dead. 17 THE COURT: And the plaintiffs have 18 accepted that or they placed their objections on the 19 record. 20 So why do you need this in where, you 21 know, I'm really having difficulty struggling with 22 you had the opportunity to ask him, and here are the 23 plaintiffs who would have cross-examined on them, and 24 so now we're going to have additional testimony with 25 regard to photographs that we already have in by a</p>	<p style="text-align: right;">Page 5126</p> <p>1 MR. CEDILLO: Your Honor -- 2 THE COURT: Unless they were the same 3 pictures that they looked at and there was testimony 4 with regard to that that, you know, may have been 5 recycled in the unpublished data. 6 MR. CEDILLO: Your Honor, the whole 7 unpublished criteria that we've been getting 8 whipsawed with. You're considering unpublished. 9 Work that he did in connection with the '95 test that 10 he chose not to publish because it showed that he got 11 1/20th of the results when he did it with the 12 syringe. That is unpublished, and so it's not fair 13 game? That is exactly why witnesses like Dr. Moline 14 and Dr. Cummings, if I had been able to confront them 15 with that, they would have said, yeah, if it's not 16 reproducible, you call it into question. I know 17 exactly what Dr. Roggli would say about that. That's 18 one of the main reasons he changed his mind when he 19 found out that Dr. Longo had the information and 20 chose not to publish it when it was so diametrically 21 opposed to the results that he did chose to publish. 22 He's got very strong views on that for that reason. 23 And the reason or the rationale is that it isn't 24 published? Yeah, he chose not to publish it because 25 it showed what a piece of junk his work was.</p>

Colloquy -

<p style="text-align: right;">Page 5127</p> <p>1 THE COURT: I don't -- I don't want to 2 take up time relitigating anew several times over 3 this motion that I've already decided. 4 What I'm asking you is were any of the 5 pictures that he testified to in relation to the 6 unpublished studies, were they the same pictures that 7 we're talking about here? 8 MR. CEDILLO: I do not believe so, your 9 Honor. 10 THE COURT: Okay. Can you make -- 11 MR. CEDILLO: They were from -- they 12 were from -- 13 THE COURT: Okay. 14 MR. CEDILLO: -- other packs. 15 THE COURT: I accept that you did not 16 ask him. Is there any way that you can make him 17 available to get this last piece of testimony in live 18 with the pictures obviously in his hands in North 19 Carolina so that counsel can cross-examine him? 20 MR. CEDILLO: I don't know the answer to 21 that, your Honor. 22 THE COURT: Why don't you look into 23 that. 24 MR. CEDILLO: Fine. I'll look into 25 that. Given the time constraints that we're all</p>	<p style="text-align: right;">Page 5129</p> <p>1 exhibits previously identified but you have not 2 sought admission. All right. You are trying to get 3 agreement on all the exhibits, like everybody? 4 MR. MAIMON: Yes, your Honor. 5 MR. CEDILLO: There's others we haven't 6 even offered, yet, Judge, for example, the ones under 7 the ancient document exception. But we've provided 8 them to counsel. And if I hear counsel correctly, 9 they may or may not have objection but they do have 10 objection about taking time to publish them is what I 11 heard. If we can at least hear from them as to 12 whether they're objecting to the admission or not, 13 then we know whether you've got work to do with us or 14 not. 15 THE COURT: Do you have an understanding 16 of that or do you need clarification? 17 MR. MAIMON: We just have to know which 18 exhibits we agree to admission and which ones we 19 object to. 20 THE COURT: But I think it went beyond 21 that. You have other documents that have not yet 22 been identified? 23 MR. CEDILLO: No, in open court here. 24 We've given them everything to consider. The 25 question I'm talking about is what Mr. Maimon raised</p>
<p style="text-align: right;">Page 5128</p> <p>1 under, understandably under, I don't know that I 2 could pull that off this week. I don't know where he 3 is. I don't know how he's doing. 4 THE COURT: Well, and you don't know 5 unless you try. And in the meantime I'll reserve on 6 that and I'll look at this testimony. 7 Okay? 8 MR. CEDILLO: All right. 9 THE COURT: So why don't we pick up from 10 here tomorrow. We'll stay and do the charges 11 tomorrow. If you're able to get a response this 12 evening, you'll let us know; otherwise we'll start 13 with the charges at 8:30 tomorrow morning. 14 MR. MAIMON: Okay. 15 THE COURT: There's nothing else I have 16 to do? 17 MR. MAIMON: Just charges. 18 MR. CEDILLO: The only other issue, your 19 Honor, we have the exhibits that we want to admit 20 into evidence. And the issue was whether we're going 21 to get to publish them or not. But we have never 22 heard from counsel as to what objections they have. 23 MR. MAIMON: We'll let them know tonight 24 what our objections are. 25 THE COURT: We're talking about the</p>	<p style="text-align: right;">Page 5130</p> <p>1 earlier today, that if they agree or if they have no 2 objection to admit them over their objection, he 3 doesn't want us taking time to publish them to the 4 jury without a sponsoring witness, which I believe 5 I'm entitled to do at least under the ancient 6 document exception. And so that is something that 7 you would have to take up. 8 THE COURT: Okay. No problem. I'll see 9 everyone at 8:30 tomorrow morning. 10 MR. DUNST: Your Honor, there's one 11 other thing. We had moved WCD-17, 18 and 19, which 12 were the 309. And you said we would hold off because 13 Mr. Maimon said there were certain things within 14 that. 15 THE COURT: Right. 16 MR. DUNST: Well, I have not heard 17 what's in there. 18 MR. MAIMON: I have them with me. I can 19 go over them with Mr. Dunst. 20 THE COURT: Why don't you do that. 21 MR. MAIMON: I will. 22 THE COURT: Okay, great. 23 All right. So you're going to check 24 with -- 25 MR. CEDILLO: Mr. Orcutt.</p>

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<p>Page 5131</p> <p>1 THE COURT: Yes. I'll see everyone 8:30 2 tomorrow morning. Thank you. 3 (The trial adjourned at 4:52 p.m.) 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	
<p>Page 5132</p> <p>1 CERTIFICATION 2 3 I, LINDA M. JORRITSMA, a Certified Court 4 Reporter of the State of New Jersey, do hereby certify 5 that the foregoing is a true and accurate transcript of 6 the within proceeding as reported by me stenographically 7 at the place and on the date hereinbefore set forth. 8 9 10 11 <i>Linda M. Jorritsma</i> 12 LINDA M. JORRITSMA, C.C.R. 13 License No. XI00995 14 Dated: August 8, 2016 15 16 17 18 19 20 21 22 23 24 25</p>	

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